SERVICE MANUAL RA-2A CHASSIS

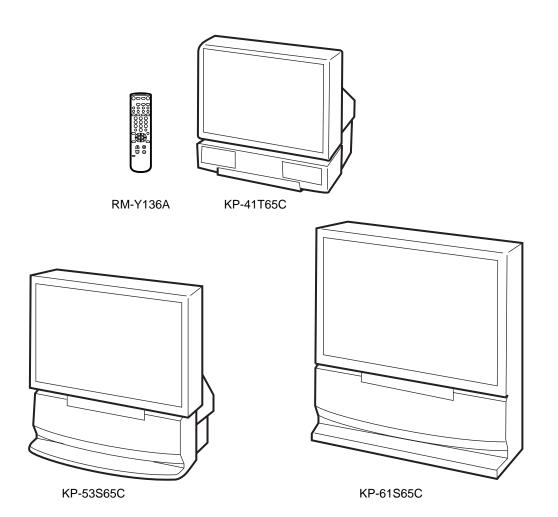
MODEL COMMANDER DEST. CHASSIS NO.

KP-41T65C RM-Y136A Chile SCC-N88A-A

KP-53S65C RM-Y136A Chile SCC-N88B-A

KP-61S65C RM-Y136A Chile SCC-N88C-A

MODEL COMMANDER DEST. CHASSIS NO.





* Please file according to model size.





61



SPECIFICATIONS

Projection system 3 picture tubes, 3 lenses,

horizontal in-line system

Picture tube 7 inch high-brightness

monochrome tubes (6.3 raster size), with optical coupling and

liquid cooling system

Projection lenses High performance, large-

diameter hybrid lens F1.1

Screen size (measured diagonally)

KP-41T65C 41 inches
KP-53S65C 53 inches
KP-61S65C 61 inches

Television system Channel coverage American TV standards VHF: 2 – 13 / UHF: 14 – 69 /

CATV: 1 - 125

VIDEO IN 1

75 ohm external antenna

terminal for VHF/UHF

Inputs/output

Antenna

VIDEO IN 2 (VIDEO 2 INPUT)

S VIDEO (4-pin mini DIN):

Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal)

75 ohms

VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync

negative

AUDIO (phono jacks): 500 mVrms (100% modulation) Impedance : 47 kilohms

VIDEO IN 3

VIDEO (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync

negative

AUDIO (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms

MONITOR OUT

VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync

negative

AUDIO (phono jacks): 500 mVrms

(100% modulation), Impedance: 10 kilohms

AUDIO OUT (phono jacks): 900 mVrms (100% modulation) Impedance: 5 kilohms Speaker Full range speaker 100 mm (3.9

inches) diameter

Speaker output 15 W x 2
Power requirement 220 V, 50 Hz
Power consumption 165 W

Standby mode: 3 W

	Dimensions (W/H/D)	Mass
KP-41T65C	951 x 1,022 x 602 mm	55 kg
	$(37^{-1}/2 \times 40^{-1}/4 \times 23^{-3}/4 \text{ inches})$	(121 lbs 4 oz)
KP-53S65C	1,218 x 1,413 x 614 mm	69 kg
	(48 x 55 ⁵ /8 x 24 ¹ /4 inches)	(152 lbs 1 oz)
KP-61S65C	1,338 x 1,506 x 642 mm (52 ³ / ₄ x 59 ³ / ₈ x 25 ³ / ₈ inches)	122 kg (268 lbs 15 oz)
	(32 1/4 x 39 1/8 x 23 1/8 menes)	(208 IDS 13 OZ)

Supplied accessories Remote control RM-Y136A (1)

Size AA (R6) battery (2)

Optional accessories U/V mixer EAC-66

Connecting cables RK-74A, VMC-810S/820S, YC-15V/30V, VMC-720M Stand SU-41T2 (For KP-41T65C) High-contrast protective screen SCN-53X2 (For KP-53S65C) SCN-61X2 (For KP-61S65C)

Design and specifications are subject to change without notice.

TABLE OF CONTENTS

Se	ction Title	Page	Sec	tion	Title	Page
1.	GENERAL					
	Step 1 : Installing the projection TV	4			High-Voltage Cable Installation and Removal	
	Step 2 : Hook up				Picture Tube Removal (KP-41T65C)	
	Step 3 : Setting up the remote control				Picture Tube Removal (KP-53S65C/61S65C)	
	Step 4 : Setting up the projection TV automatically				Service stay Assy How to use and Carry Back Serv	
	(AUTO SET UP)	9			stay Assy	
	Changing the menu larguage				Picture Tube Bracket Assy Removal (KP-41T65C)	
	Watching the TV				Picture Tube Bracket Assy Removal (KP-53S65C/61S65C	
	Watching tow programs at one time-PIP				Setting of Service stay Assy (KP-53S65C)	
	Freezing the picture (FREEZE)			2-9-5.	Install a Chassis Assy	30
	Adjusting the picture (VIDEO)					
	Adjusting the color temperature (TRINITONE)		3	SET	UP ADJUSTMENTS	31
	Selecting the video mode (VIDEO)		3.	OL I	OI ADOOOTIMENTO	31
	Adjusting the sound (AUDIO)		4.	SAFE	TY RELATEDP ADJUSTMENTS	44
	Using audio effect (SURROUND)			-		
	Selecting stereo or bilingual programs (MTS)		5.	CIRC	UIT ADJUSTMENTS	46
	Setting the speaker switch (SPEAKER)					
	Setting audio out (AUDIO OUT)		6.	DIAG	RAMS	
	Setting daylight saving time (DAYLIGHT SAVING)					
	Setting the clock (CURRENT TIME SET)				ock Diagram (1)	
	Setting the timer to turn the projection TV on and off				ock Diagram (2)	
	(ON/OFF TIMER)	17			ock Diagram (3)	
	Customizing the channel names (CHANNEL CAPTION)				ame Schematic Diagram	
	Blocking out a channel (CHANNEL BLOCK)				reuit Boards Location	
	Setting your favorite channels (FAVORITE CHANNEL).				inted Wiring Boards and Schematic Diagrams	
	Setting video labels (VIDEO LABEL)				A Board	
	Setting Caption Vision (CAPTION VISION)				G Board	
	Operating video equipment				PT Board	
	Operating a cable box or DBS receiver				CR, CG, CB Boards	
	Troubleshooting				Z Board	
	Index to parts and controls				HA Board	
					F Board	
2.	DISASSEMBLY			6-5. Se	emiconductors	88
	2-1. Rear Board Removal		7.	EXPL	LODED VIEWS	
	2-2. Chassis Assy Removal	23		7.1.C	over (KP-41T65C)	00
	2-3. Service Position				over (KP-53S65C)	
	2-4-1. HA Board Removal (KP-41T65C)				over (KP-61S65C)	
	2-4-2. HA Board Removal (KP-53S65C/61S65C)				nassis (KP-41T65C)	
	2-5-1. Beznet Assy Removal (KP-41T65C)	25			nassis (KP-53S65C/61S65C)	
	2-5-2. Beznet Assy Removal (KP-53S65C)				cture Tube (KP-41T65C)	
	2-5-3. Screen Frame Assy Removal (KP-61S65C)				cture Tube (KP-41103C)	
	2-6-1. Mirror Cover Assy Removal (KP-41T65C)			,-,.11	Cuite 1 uote (MI -33503C/01503C/	70
	2-6-2. Mirror Cover Assy Removal (KP-53S65C/61S65C)		8.	ELEC	CTRICAL PARTS LIST	97
	2-6-3. Reflection Mirror Removal (KP-61S65C)	26				
	(CAUTION)			-	AFFTY DEL ATED COMPONENT WARNING!	

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE AN-ODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BE-CAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECT-ED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESECOMPONENTS WITH SONY PARTS WHOSE PART NUM-BERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLE-MENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFEOPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITI-CAL COMPONENTS ARE REPLACED OR IMPROPER OPERA-TION IS SUSPECTED.

SECTION 1 GENERAL

The operating instructions mentioned here partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Welcome!

Thank you for purchasing the Sony Color Rear Video Projection TV. Here are some of the features you will enjoy with your projection TV:

- · On-screen menus that let you set the picture quality, sound, and other settings.
- · Two tuner Picture-in-Picture (PIP) that allows you to watch another TV channel, video or cable image as a window picture.
- · Surround system that simulates the sound quality of a concert hall or movie theater.
- · SAVA SPEAKER option of the AUDIO menu that lets you take advantage of the Sony SAVA series speaker system's surround sound and super woofer mode when you connect it to the projection TV.

About this manual

The instructions in this manual are for models KP-41T65, KP-46C65, KP-48S65, KP-53S65, and KP-61S65. Before you start reading this manual, please check your model number, located at the rear of the projection TV. Model KP-53S65 is used for illustration purposes in this manual. Any differences in operation are clearly indicated in the text, for example "KP-61T65 only." The differences in specifications are indicated in the

Instructions in this manual are based on use of the remote control. You can also use the controls on the projection TV if they have the same name as those on the remote control

Precautions

This projection TV operates on extremely high voltage. To prevent fire or electric shock, please follow the precautions below.

- Operate the projection TV only on 120 V AC.
- One blade of the plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the projection TV and have it checked by qualified personnel before operating it further.
- Unplug the projection TV from the wall outlet if you are not going to use it for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

For details concerning safety precautions, see the supplied leaflet "IMPORTANT SAFEGUARDS."

Note on cleaning

Clean the cabinet of the projection TV with a dry soft cloth. To remove dust from the screen, wipe it gently with a soft cloth using vertical strokes only. Stubborn stains may be removed with a cloth slightly dampened with solution of mild soap and warm water. Never use strong solvents such as thinner or benzine for cleaning. If the picture becomes dark after using the projection TV for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel.

Installing

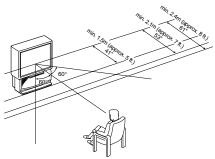
- · To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the projection TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- · Avoid operating the projection TV at temperatures below 5°C (41°F).
- If the projection TV is transported directly from a cold to a warm location, or if the room temperature has changed suddenly, the picture may be blurred or show poor color. This is because moisture has condensed on the mirror or lenses inside. If this happens, let the moisture evaporate before using the projection TV.
- · To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the projection TV in a room where the floor and walls are not of reflecting material. If necessary, cover them with dark carpeting or wall paper.

Getting Started

Step 1: Installing the projection TV

For the best picture quality, install the projection TV within the areas shown below.

Optimum viewing area (Horizontal)



Optimum viewing area (Vertical)

Carry your projection TV by the casters.

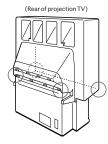
■ KP-61S65C only

Before you use your projection TV, adjust convergence. For the procedure, see Step 4: Setting up the projection

Carrying your projection TV

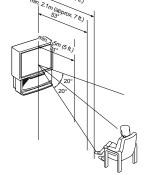
■ KP-41T65C/53S65C only

Be sure to grasp the areas indicated when carrying the projection TV, and to use more than two people.



Preparing for your projection TV

TV automatically (AUTO SET UP) on page 14.



EN

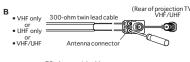
Step 2: Hookup

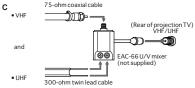
Although you can use either an indoor or outdoor antenna with your projection TV, we recommend that you connect an outdoor antenna or a cable TV system to get better picture quality.

Connecting an antenna

Connect your antenna cable to the VHF/UHF antenna terminal. If you cannot connect your antenna cable directly to the terminal, follow one of the instructions below depending on your cable type.







Notes

- Most VHF/UHF combination antennas have a signal splitter. Remove the splitter before attaching the appropriate connector.
- · If you use the U/V mixer, snow and noise may appear in the picture when viewing cable TV channels over 37.

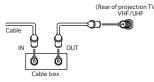
Connecting an antenna/cable TV system without a VCR

To cable or antenna

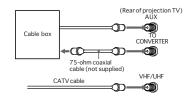


To cable box

If your cable company requires you to connect a cable box, make the connection as follows:



To cable box and cable

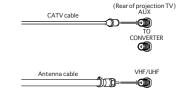


Pay cable TV systems use scrambled or encoded signals requiring a cable box* in addition to the normal cable connection.

* The cable box will be supplied by the cable company.

• You cannot watch the signal through an AUX connector as a window picture

To cable and antenna



• Do not connect anything to the TO CONVERTER connector in

Connecting an antenna/cable TV system with a VCR

For details on connection, see your VCR instruction

Before making the connection, disconnect the AC power cords of the equipment to be connected.

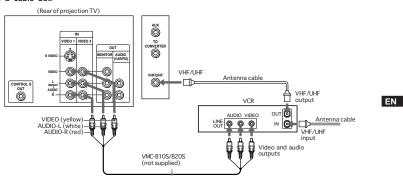
Notes

to AUDIO-L (MONO) of VIDEO 1/2/3 IN on the projection TV.

To a conventional VCR

· To connect a monaural VCR, connect the audio output of the VCR

Without a cable box



the following:

program

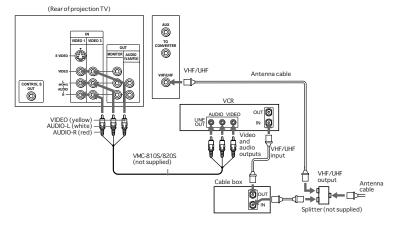
After making these connections, you will be able to do

· Record one TV program while viewing another

· Watch two TV programs at once using PIP

· View the playback of video tapes

With a cable box

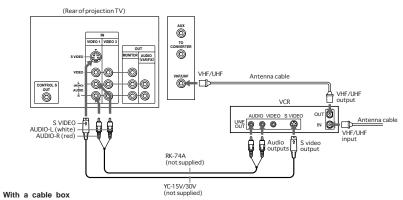


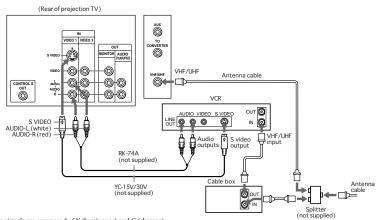
To an S video equipped VCR

If your VCR has an S VIDEO output connector, make the following connections.

Whenever you connect the cable to the S VIDEO input connector, the projection TV automatically receives S video signals.

Without a cable box





Note

0

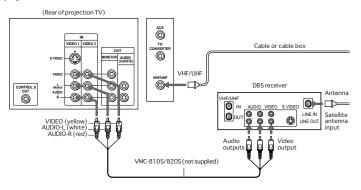
 Video signals are composed of Y (luminance) and C (chroma) signals. The S connection sends the two signals separately preventing degradation, and gives better picture quality compared to conventional connections.

8-EN | Getting Started

Connecting a DBS receiver

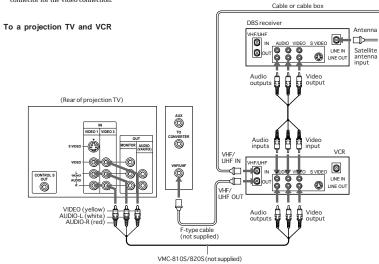
For details on connection, see the instruction manual of the DBS (Digital Broadcasting Satellites) receiver.

To a projection TV



Note

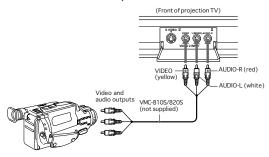
 You can use the S VIDEO connector or the composite video connector for the video connection.



Getting Started

Connecting a camcorder

Use this connection to view a camcorder picture.

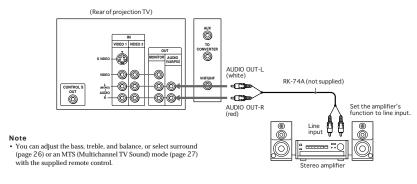


Note

 To connect a monaural camcorder, connect the audio output of the camcorder to AUDIO-L (MONO) of VIDEO 2 INPUT on the projection TV.

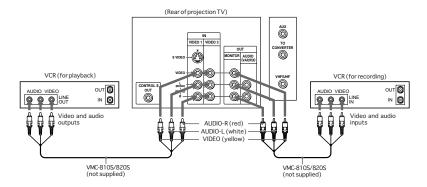
Connecting an audio system

When connecting audio equipment, see page 28 for more information.



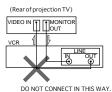
Connecting two VCRs for tape editing using MONITOR OUT

You can record input images displayed on the screen. This type of connection should be used only when you connect from the line input of one VCR, and from the line output of a second VCR.



Notes

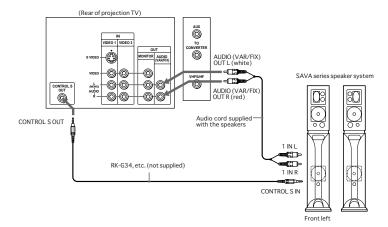
- · Do not change the input signal while editing through MONITOR OUT, or the output signal will also change
- You can use the S video jack to connect a VCR for playback and the composite video connector to connect a VCR for recording.
- · When connecting a single VCR to the projection TV, do not connect the MONITOR OUT to the VCR's line input, while at the same time connecting from the projection TV's VIDEO IN connectors to the VCR's line output, as shown below.



Connecting a Sony SAVA series speaker system

If you have a Sony SAVA series speaker system, connect your speakers to the AUDIO (VAR/FIX) OUT jacks on the rear of the projection TV with the audio cable supplied with the speakers. You can take advantage of the speakers' Dolby Pro Logic* surround system and super woofer mode, and control them with the supplied remote control. When connecting a Sony SAVA series speaker system, see page 27 for more information.

* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under Canadian patent number 1,037,877. "Dolby," the double-D symbol □□ and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation.



Step 3: Setting up the remote control

Inserting batteries

Insert two size AA (R6) batteries (supplied) by matching the + and - on the battery to the diagram inside the battery compartment.





Notes

- · Under normal conditions, batteries will last up to six months. If the remote control does not operate properly or the indicators of the buttons on the remote control do not light up. the batteries may be worn out. When replacing batteries, replace both of them with new ones.
- Do not mix old batteries with new ones or mix different types of batteries together.
- · If the electrolyte inside the battery should leak, wipe the contaminated area of the battery compartment with a cloth and replace the old batteries with new ones. To prevent the electrolyte from leaking, remove the batteries when you don't plan to use the remote control for a long period of time.
- Do not handle the remote control roughly. Do not drop it, step on it, or let it get wet.
- · Do not place the remote control in direct sunlight, near a heater, or where the humidity is high.

Getting to know buttons on the remote control

Names of buttons on the remote control are indicated in different colors to represent the available functions.

Button color

Transparent TV/VCR/DBS/Cable box function buttons. Press the appropriate (light up) function button first to change the

remote control's function.

Green Buttons relevant to power operations.

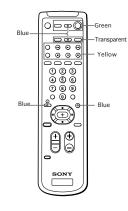
Label color

TV/VCR/DBS/Cable box operation White .

buttons.

Yellow... PIP operation buttons.

DBS operation buttons.



EN

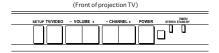
12-EN Getting Started Getting Started |13-EN

Step 4: Setting up the projection TV automatically

(AUTO SET UP)

You can set up your projection TV easily by using the AUTO SET UP feature. It presets all the receivable channels, adjusts the convergence and changes the onscreen menu language. To set up the projection TV manually, see "Adjusting convergence" (page 16), "Setting cable TV on or off" (page 17), "Presetting channels" (page 18) and "Changing the menu language" (page 18).

If the projection TV is set to a video input, you cannot perform AUTO SET UP. Press TV/VIDEO so that a channel number appears.



Before you start using AUTO SET UP, be sure to connect the antenna or cable to the projection TV (see page 6).

1 Press POWER to turn the projection TV on.



2 Press SETUP on the front of the projection TV.

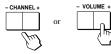
AUTO SET UP screen appears.





3 Press CHANNEL +/- or VOLUME + to select the on-screen menu language.

If you prefer Spanish or French to English, you can change the on-screen menu language.



All of the menus will be set to the factory preset condition in the selected language.

4 Press VOLUME – to start AUTO SET UP.





5 Press CHANNEL + to preset channels.





"AUTO PROGRAM" appears on the screen and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the following menu appears. If the projection TV receives cable TV channels. CABLE is set to ON automatically.

CONTINUE TO CONVERGENCE? YES: [CH+] NO: [CH-]

To exit AUTO PROGRAM Press any button.

6 Adjust convergence.

(1) Press CHANNEL +.

The CONVERGENCE adjustment screen appears.



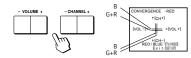


(2) Press TV/VIDEO to select RED or BLUE.



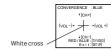


(3) Using CHANNEL +/- or VOLUME +/-, move the line until it converges with the center green line



To move horizontal line up/down, press CHANNEL To move vertical line right/left, press VOLUME +/-.

(4) Repeat steps (2) and (3) to adjust the other lines until all three lines converge and are seen as a white cross.



Note

· Using the AUX connector, press TV (black button) first and make sure that "AUX" is displayed beside the channel number on the screen. Then follow the steps 2 to 6 above to perform AUTO SET UP.

To preview the main functions (DEMO)

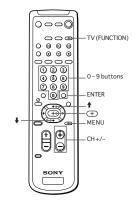
Press TV/VIDEO on the projection TV in step 4. The functions and menus are displayed one by one.

To exit DEMO

Press any button.

Erasing or adding channels

After AUTO SET UP, you can erase unnecessary channels or add the channels you want. Preset channels during the day rather than late at night, when some channels may not be broadcasting.



1 Press TV (FUNCTION).

— FUNCTION —



2 Press MENU.

The main menu appears.

MENU



EN

3 Press ★ or ★ to select ♠, and press ④. The SET UP menu appears.

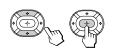




14-EN Getting Started

4 Press ★ or ★ to select CHANNEL ERASE/ADD. and press (+).

The CHANNEL ERASE/ADD menu appears.





5 Erase and/or add channels:

To erase an unwanted channel

- (1) Make sure the cursor (▶) is beside ERASE.
- (2) Press CH +/- or the 0 9 buttons to select the channel you want to erase, and press ENTER.



(3) Press (+).

The "-" indication appears beside the channel number, showing that the channel is erased from the preset memory.



To add a channel that you want

- (1) Press ★ or ▼ to move the cursor (►) to ADD.
- (2) Press the 0 9 buttons to select the channel you want to add, and press ENTER.

Selected channel number





(3) Press (+).

The "+" indication appears beside the channel number, showing that the channel is added to the preset memory.



6 To erase and/or add other channels, repeat

7 Press MENU to return to the original screen.



Notes

- · If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and vice versa.
- · Erasing and adding channels is also available for the AUX

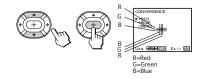
Adjusting convergence (CONVERGENCE)

The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs. To correct this, adjust convergence.

You do not have to do this procedure if you perform AUTO SET UP (page 14). Do this procedure only when you want to adjust it manually.

- 1 Press MENU.
- 2 Press ★ or ♦ to select 🖶 , and press 🖜.
- 3 Press ★ or ★ to select CONVERGENCE, and press 🚓.

The CONVERGENCE adjustment screen appears.



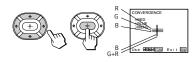
4 Press ♠, ♠, ♦, or ▶ to move the cursor (▶) to the symbol showing the line you want to adjust, and press .







- +RED: Red vertical and horizontal line (left/right/up/ down adjustment)
- +BLUE : Blue vertical and horizontal line (left/right/up/ down adjustment)
- 5 Press ♠, ♠, ♦, or ➤ to move the line until it converges with the center green line, and press 垂.



_		
	To move	Press
	Up	+
_	Down	+
	Right	+
	Left	+

- 6 Repeat steps 4 and 5 to adjust the other lines until all three lines converge and are seen as a white cross.
- 7 Press MENU to return to the original screen.

Setting cable TV on or off

If you have connected the projection TV to a cable TV system, set CABLE to ON (the factory setting). If not, set CABLE to OFF.

You do not have to do this procedure if you perform AUTO SET UP (page 14). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press ★ or ★ to select ♠, and press ↔.
- 3 Set CABLE to ON or OFF:
 - (1) Press ♠ or ♥ to move the cursor (▶) to CABLE, and press 🗭.
 - (2) Press ★ or ♥ to select ON or OFF, and press ⊕







4 Press MENU to return to the original screen.

• If CABLE appears in gray, the projection TV is set to a video input and you cannot select CABLE. Press TV (black button) so that a channel number appears.

Presetting channels

You can preset TV channels easily by using the AUTO PROGRAM feature.

You do not have to do this procedure if you perform AUTO SET UP (page 14). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press ♦ or ♦ to select ♠, and press ⊕.
- 3 Press ★ or ★ to select AUTO PROGRAM, and press ⊕.







- "AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.
- 4 Press MENU to return to the original screen.

To exit AUTO PROGRAM

Press any button.

Notes

- If the AUTO PROGRAM menu appears in gray, the projection TV is set to a video input and you cannot select AUTO PROGRAM. Press ANT button so that a channel number appears.
- Presetting channels is also available for the AUX input.

Changing the menu language

If you prefer Spanish or French to English, you can change the menu language.

You do not have to do this procedure if you select the language during AUTO SET UP (page 14). Do this procedure only when you want to set it manually.

- 1 Press MENU.
- 2 Press ★ or ★ to select ♠, and press ↔.
- **3** Press ★ or ★ to select LANGUAGE, and press ⊕.







4 Press ★ or ★ to select your favorite language, "ENGLISH", "ESPAÑOL," or "FRANCAIS" and press (♣).







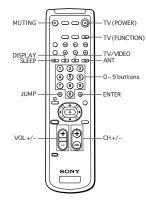
5 Press MENU to return to the original screen.

Note

 Certain parts of the Spanish or French menus remain in English.

Operations

Watching the TV



1 Press TV (POWER) to turn on the projection TV.

The TIMER/STANDBY indicator flashes until the picture appears.



If "VIDEO" appears on the screen, press ANT so that a channel number appears.

2 Press TV (FUNCTION).



Once you press TV (FUNCTION), the projection TV function is set unless another function button is pressed.

3 Select the channel you want:

To select a channel directly

Press the 0-9 buttons, and press ENTER. For example, to select channel 10, press 1,0 and ENTER.

0 0 0 m

To scan through channels

Press CH +/- until the channel you want appears.



The channel can also be selected without pressing ENTER.

4 Press VOL +/- to adjust the volume.





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Switching quickly between two channels

You can use the JUMP button to switch or "jump" back and forth between two channels.

Press JUMP.



Pressing JUMP again switches the channel back to the one you selected last.

Note

 You cannot jump to channels you scanned through using the CH +/- buttons.

Muting the sound

Press MUTING.

"MUTING" appears on the screen.

MUTING

To restore the sound, press MUTING again, or press VOL +. Operations |1 9-EN

Displaying on-screen information

Press DISPLAY repeatedly until the desired display appears.

Each time you press DISPLAY, the display changes as follows:

Status display* \rightarrow XDS ON** \rightarrow \boxed{cc} 1 ON*** — DISPLAY OFF ←

- * Channel number, the current time, channel caption (if set), and MTS mode (if SAP is selected) are displayed. SAP indication disappears after three seconds.
- ** Some programs are broadcast with XDS (Extended Data Service) which shows a network name, program name, program type, program length, call letters, and time of the show. When you select XDS with the DISPLAY button, this information will be displayed on the screen if the broadcaster offers this service.
- *** Some programs are broadcast with Caption Vision. When you select Caption Vision with the DISPLAY button, Caption Vision will be displayed on the screen if the broadcaster offers this service. (See page 34 for selecting Caption Vision.)

To cancel the display, press DISPLAY repeatedly until "DISPLAY OFF" appears. "DISPLAY OFF" goes off after three seconds.

Setting the Sleep Timer

The projection TV stays on for the length of time you specify and then shuts off automatically.

Press SLEEP repeatedly until the time (minutes) you want appears.

Each time you press SLEEP, the time changes as follows:

 $30 \rightarrow 60 \rightarrow 90 \rightarrow \text{SLEEP OFF}$

To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP OFF" appears, or turn off the projection

20-EN Operations

Watching a video input picture

Press TV/VIDEO repeatedly until the desired video input appears.

Each time you press TV/VIDEO, the display changes as follows:



To return to the TV picture, press ANT so that a channel number appears.

Changing the VHF/UHF input to the AUX input

Press ANT.

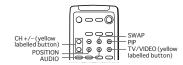
"AUX" appears beside the channel number.



Pressing ANT again switches back to the VHF/UHF input.

Watching two programs at one time — PIP

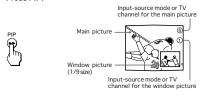
The Picture-in-Picture (PIP) feature allows you to watch both the main picture and a window picture simultaneously.



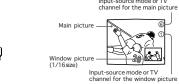
Use the yellow labelled buttons for PIP operations.

Displaying a window picture

Press PIP.



Press PIP again to display a smaller window picture. Input-source mode or TV



To remove the window picture, press PIP again

· The window picture may be affected by the condition of the main picture.

Changing the window picture input mode

Press TV/VIDEO (yellow labelled button) to select the input mode.

Each time you press TV/VIDEO (yellow labelled button), "TV", "VIDEO 1", "VIDEO 2", and "VIDEO 3" appear in sequence.





A window picture will appear in the same input mode as the last time you used PIP.

Note

· If you connect your VCR without a cable box, your PIP input source is a VCR. If you connect your VCR with a cable box, your PIP input source is a VCR or cable box.

Listening to the sound of the window picture

Press AUDIO.

The A display appears next to the PIP channel number for a few seconds, indicating that the window picture sound is being received.





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To restore the main picture sound, press AUDIO again. The J display moves to the main picture channel number.

Changing TV channels in the window picture

Press CH +/- (yellow labelled button).





Operations |21-EN

Changing the position of the window picture

Press POSITION.

Each time you press POSITION, the window picture will move counterclockwise on the screen.



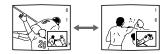


Swapping the main and window pictures

Press SWAP.

Each time you press SWAP, the images and sound from the main and window pictures switch places with another.





· The channels being received through the AUX connector cannot be displayed as a window picture.

Freezing the picture (FREEZE)

The FREEZE feature is useful when you want to write down an information such as a recipe from a cooking program, a displayed address, or a phone number. The frozen picture changes as follows depending on whether the PIP function is used or not.



Press FREEZE.



When the PIP function is not being used



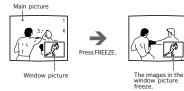




The frozen picture

To remove the frozen window picture, press FREEZE again.

When the PIP function is being used

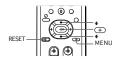


To cancel the frozen window picture, press FREEZE

Adjusting the picture (VIDEO)

When watching TV programs, you can adjust the picture to suit your taste.

You can adjust the picture of video input(s) as well.



- 1 Press MENU.
- 2 Press or to select •, and press •.







- 3 Select the item you want to adjust. For example:
 - (1) To adjust the brightness, press ★ or ♥ to move the cursor (▶) to BRIGHTNESS.











- 4 Adjust the selected item:
 - (1) Press ♠, ♠, ♥, or ▶ to adjust the item.





(2) Press (+)

The new setting appears in the VIDEO menu.





For details on each item, see "Description of adjustable items" below.

- 5 To adjust other items, repeat steps 3 and 4.
- 6 Press MENU to return to the original screen.

Description of adjustable items

zooopo o. aajao.aa.ooo		
Item	Press ◆ or ♦ to	Press ⇒ or + to
PICTURE	Decrease picture contrast and give soft color.	Increase picture contrast and give vivid color.
HUE	Make picture tones become purplish.	Make picture tones become greenish.
COLOR	Decrease color intensity.	Increase color intensity
BRIGHTNES	S Darken the picture.	Brighten the picture.
SHARPNESS	Soften the picture.	Sharpen the picture.

To restore the factory settings

Press RESET after displaying and selecting the VIDEO

All of the settings are restored to the factory settings.

Adjusting the color



- 1 Press MENU.
- 2 Press ★ or ♦ to select iii and press ↔.
- **3** Press ♦ or ♦ to select TRINITONE and press







4 Press ★ or ★ to select NTSC STD, MEDIUM, or HIGH and press ⊕.







Choose	То	Τ
HIGH	a cool (bluish) white.	_
MEDIUM	a neutral white.	_
NTSC STD	a warm (reddish) white.	_

Selecting the video mode (VIDEO)

The video mode feature allows you to choose three different modes of picture settings. Choose the one that best suits the type of program that you want to watch.

- 1 Press MENU.
- 2 Press or to select •, and press •.
- 3 Press ★ or ★ to select MODE, and press ⊕.
- 4 Press ♠ or ♦ to select STANDARD, MOVIE, or SPORTS mode, and press ⊕.







Choose	То
STANDARD	Receive a standard picture.
MOVIE	Receive a finely detailed picture
SPORTS	Receive a vivid, bright picture.

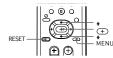
5 Press MENU to return to the original screen.

Note

The settings for these modes can be adjusted in the VIDEO menu.

Adjusting the sound (AUDIO)

You can adjust the quality of the TV sound to suit your taste. You can adjust the sound of the video input(s) as well



- 1 Press MENU.
- 2 Press ♠ or ♦ to select ♪, and press ⊕.







- 3 Select the item you want to adjust. For example:
 - To adjust bass, press ◆ or ◆ to move the cursor
 to BASS.





(2) Press 🛨.





- 4 Adjust the selected item:
 - (1) Press ♠, ♠, ♦, or ♦ to adjust the item.





(2) Press (+).

The new setting appears in the AUDIO menu.





For details on each item, see "Description of adjustable items" below.

- 5 To adjust other items, repeat steps 3 and 4.
- 6 Press MENU to return to the original screen.

Description of adjustable items

Item	Press ♦ or ♦ to	Press ★ or → to
TREBLE	Decrease the treble response.	Increase the treble response.
BASS	Decrease the bass response.	Increase the bass response.
BALANCE	Emphasize the left speaker's volume.	Emphasize the right speaker's volume.

To restore the factory settings

Press RESET after displaying and selecting the AUDIO menu.

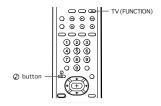
All of the settings are restored to the factory settings.

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When SPEAKER (page 27) is OFF and AUDIO OUT (page 28) is in the FIXED condition, the volume, TREBLE, BASS, and BALANCE cannot be adjusted.

24-EN Operations

Using the ② (audio effect) button



- 1 Press TV (FUNCTION).
- 2 Press ②.

15

Each time you press the @ button, the display changes as follows:

 $SURROUND \rightarrow SURROUND OFF$



Using the menu to set audio effect



- 1 Press MENU.
- 2 Press ★ or ★ to select ♪, and press ⊕.
- 3 Press ★ or ★ to select EFFECT, and press ④.







4 Press ★ or ★ to select the audio effect mode, and press 🛨.







5 Press MENU to return to the original screen.

Selecting stereo or bilingual programs (MTS)

The Multichannel TV Sound (MTS) feature allows you to enjoy stereo sound or Second Audio Programs (SAP) of your choice. The initial setting is stereo sound



Press MTS repeatedly to select STEREO, SAP, or

Choose	То
STEREO	Listen to stereo sound. The STEREO indicator on the projection TV lights up when a stereo broadcast is received.
SAP	Listen to bilingual programs. There is no sound when the SAP signal is not broadcasting.
MONO	Listen to monaural sound. Reduce noise during stereo broadcasts.

· Stereo and SAP sounds are subject to program sources.

To set MTS using the menu

- 1 Press MENU.
- 2 Press ♠ or ♦ to select ♪, and press ⊕.
- 3 Press ♠ or ♥ to select MTS, and press ⊕.
- 4 Press ★ or ♥ to select STEREO, SAP, or MONO.
- 5 Press MENU to return to the original screen.

Setting the speaker switch (SPEAKER)

You may switch off the projection TV speakers when, for example, you want to listen to the sound through a stereo system.

If you connect the Sony SAVA series speaker system to the AUDIO (VAR/FIX) OUT connectors, you can take advantage of the speakers' surround sound and super woofer mode. After making the connections (page 12), set SPEAKER to SAVA SPEAKER, then adjust SURROUND MODE or SUPER WOOFER MODE.



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- 1 Press MENU.
- 2 Press ★ or ★ to select ♪, and press ⊕.
- 3 Press ★ or ★ to select SPEAKER, and press







4 Press ★ or ★ to select ON, OFF, or SAVA SP, and press 🕩.







5 Press MENU to return to the original screen.

Choose	То
ON	Listen to the sound from the projection TV.
OFF	Turn off the projection TV speaker sound and listen to the projection TV's sound solely through the audio system speakers.
SAVA SP	Turn off the projection TV speaker sound and listen to the projection TV's sound through the Sony SAVA series speaker system. You can adjust volume, muting, surround modes, and super woofer mode with the remote control supplied with the projection TV.

To select surround sound or super woofer mode of the SAVA speaker system

After setting SPEAKER to SAVA SP, follow the procedure below.

Press ♠ or ♦ to select SURROUND MODE or SUPER WOOFER MODE, and press \oplus .

For details on each option, refer to the operating instructions of the speaker system.







 This feature is only for Sony SAVA speaker system with an operation capability for KP-41T65C, KP-53S65C, and KP-61S65C.

Setting audio out (AUDIO OUT)

You can change AUDIO OUT to VARIABLE or FIXED when SPEAKER is set to OFF. AUDIO OUT is variable when SPEAKER is set to ON.



- 1 Press MENU.
- 2 Press ★ or ★ to select ♪, and press ⊕.
- 3 Press ♠ or ♦ to select AUDIO OUT, and press







4 Press ★ or ★ to select VARIABLE or FIXED, and press +.







VARIABLE: Sound output varied according to the projection TV settings. You can adjust the volume, bass, treble, and balance.

FIXED: Sound output is always fixed to a certain level. The volume, bass, treble, and balance are also fixed to the factory settings.

5 Press MENU to return to the original screen.

¥ If AUDIO OUT appears in gray, set SPEAKER to OFF.

Setting daylight saving time (DAYLIGHT SAVING)

If your area uses daylight saving time, change DAYLIGHT SAVING setting depending on the season, before setting the current time.

Davlight saving start

· After the first Sunday in April, set DAYLIGHT SAVING to YES. Current time setting (right column) automatically moves one hour ahead.

Daylight saving end

· After the last Sunday in October, set DAYLIGHT SAVING to NO. Current time setting automatically moves one hour back.



- 1 Press MENU.
- 2 Press ★ or ★ to select ②, and press ④.
- 3 Press ★ or ★ to select DAYLIGHT SAVING, and press +.







Press ★ or ★ to select YES or NO, and press







Choose	То
YES	Set for daylight saving start.
NO	Set for daylight saving end.

5 Press MENU to return to the original screen.

Setting the clock (CURRENT TIME SET)

Setting the clock enables you to turn the projection TV on and off with the timer. Make sure to set daylight saving time first.



- 1 Press MENU.
- 2 Press or to select ①, and press ①.
- 3 Press * or * to select CURRENT TIME SET, and press (+).







EN

4 Make sure the cursor (▶) is to the left of "--:-- AM," and press ⊕.





5 Set the current day of the week and time. (1) Press ★ or ▼ to set the day of the week, and press





Set the time

CURRENT TIME SET

FRI 12:00 AM ⊋MENU

(2) Set the hour and minutes in the same way as in step (1). When you press + after setting the minutes, the clock starts.







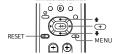
6 Press MENU to return to the original screen.

Operations |29-EN

Setting the timer to turn the projection TV on and off

(ON/OFF TIMER)

You can set the projection TV to turn on and off at the times you specify. Make sure the clock is set correctly. If it is not, set the clock first (page 29).



- 1 Press MENU.
- 2 Press ★ or ★ to select ④, and press ↔.
- 3 Press ♠ or ♦ to select ON/OFF TIMER, and press ⊕.







- 4 Press and enter the ON/OFF TIMER setting.
 - (1) Press ★ or ♥ to set the day(s), and press ↔
 - Each time you press ♠ or ♣, the days cycle as follows:
 - EVERY SUN-SAT→EVERY MON-FRI→ SUNDAY→...→SATURDAY→EVERY SUNDAY→...→EVERY SATURDAY









(2) Press ♦ or ♦ to set the time (hour then minutes) that you want to turn on the projection TV, and press ⊕.





ON/OFF TIMER

EVERY SUN – SAT

12:02 AM _h CH____

DMENU

Set the duration.

SUN 12:00 AM

Use 1990 ET Exit ES

(3) Press ♠ or ♥ to set the time duration, and press ⊕.

Each time you press •, the time duration increases by one hour up to a maximum of six hours.







(4) Press ♠ or ♥ to select the channel, and press ⊕.





The TIMER indicator on the projection TV lights up.

- **5** To set the other program, press ①, and repeat step 4.
- 6 Press MENU to return to the original screen.

One minute before the projection TV turns off, the message "TV will turn off soon." is displayed on the screen.

To cancel the timer In step 3 or 4, press RESET.

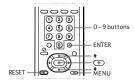
Note

 If you unplug the projection TV or a power interruption occurs, the ON/OFF TIMER setting will be erased. Reset the current time, then set the timer.

Customizing the channel names

(CHANNEL CAPTION)

You can add a caption for up to 12 channels. This feature allows you to easily identify which channel you are watching. You can make your own caption.



- 1 Press MENU.
- 2 Press ★ or ★ to select 🖶, and press 🕁.







3 Press ★ or ★ to select CHANNEL CAPTION, and press ★.







4 Press ⊕ and press ♠ or ♠ to select the channel that you want to caption, and press ⊕.









- 5 Enter the letters (up to four) to caption the channel:
 - (1) Press ♠ or ♣ to select the first letter.

Each time you press ♠ or ♣, the letter changes as follows:

0...9 ← A...Z ← &,/,_(blank space)



(2) Press (+).





EN

- (3) Repeat steps (1) and (2) to select the remaining letters, and press (+).
- 6 Repeat steps 4 and 5 to caption other
- 7 Press MENU to return to the original screen.

After you customize the channel, the channel caption appears green.

To erase a caption

channels.

In step 5, press RESET.

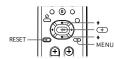
Notes

- If the CHANNEL CAPTION menu appears in gray, the projection TV is set to a video input, and you cannot select CHANNEL CAPTION. Press TV (black button) so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- The channel caption feature is not available for the AUX input.

30-EN Operations 31-EN

Blocking out a channel (CHANNEL BLOCK)

The channel block feature allows you to prevent children from watching unsuitable programs. You can block out two channels.



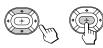
- 1 Press MENU.
- 2 Press ★ or ★ to select 🖶, and press ↔.
- 3 Press ★ or ★ to select CHANNEL BLOCK, and press Ð.



4 Press ★ or ★ to select program 1 or 2, and press (+).



5 Press ★ or ★ to select the channel which you want to block out, and press +.



6 Press MENU to return to the original screen.

When you select the blocked channel, the message "BLOCKED" appears on the screen.



To cancel a CHANNEL BLOCK setting In step 4 or 5, press RESET.

- Once you use CHANNEL BLOCK, Caption Vision and XDS of the blocked channel and the selected channel output from MONITOR OUT are also blocked out.
- 32-EN Operations

Setting your favorite channels

(FAVORITE CHANNEL)

The favorite channel feature allows your projection TV to memorize your favorite channels easily. If you set to AUTO, the last five channels you selected with the 0 - 9 buttons are automatically set as your favorite channels. If you want to input your own selection of channels, set to MANUAL.

Setting your favorite channels



- 1 Press MENU.
- 2 Press ★ or ♦ to select 🖶, and press 🖜.
- 3 Press ★ or ★ to select FAVORITE CHANNEL, and press (+).







4 Press ⊕ and press • or • to select AUTO or MANUAL, and press (+).







If you select AUTO, skip steps 5 and 6. The last five channels you selected with the 0 - 9 buttons are automatically set as your favorite channels.

If you select MANUAL, the favorite channel numbers become white, indicating that favorite channels can be entered.

5 Press ★ or ★ to select a favorite channel number, and press +.







6 Press ★ or ▼ to select the channel that you want to set as your favorite channel, and







7 Press MENU to return to the original screen.

- If the FAVORITE CHANNEL menu appears in gray, the projection TV is set to a video input and you cannot select FAVORITE CHANNEL.
- · If more than 90 seconds elapse after you press another button, the menu disappears automatically.
- · The favorite channel feature is not available for the AUX input.

Selecting your favorite channel



1 Press (+). The FAVORITE CHANNEL menu appears.





2 Press ★ or ★ to select the favorite channel you want to watch, and press (+). The selected channel appears on the screen.



To cancel the FAVORITE CHANNEL menu Press ♠ or ♦ to select "Exit," and press (+).

Setting video labels (VIDEO LABEL)

The video label feature allows you to label each input mode so that you can easily identify the connected equipment. For example, you can label VIDEO 1 as



- 1 Press MENU.
- 2 Press ★ or ★ to select 🖶, and press 🚯.
- 3 Press ★ or ★ to select VIDEO LABEL, and press (+).







EN

4 Press ★ or ★ to select the input mode you want to label, and press .







5 Press ★ or ★ to select the label, and press







Each time you press ♠ or ♣, the label changes as follows:

VIDEO 1
$$\begin{array}{c} \text{VIDEO 1} \\ \text{VIDEO 1} & \leftarrow \text{VHS} \\ \downarrow \\ \text{DBS} \leftarrow \text{DVD} \\ \leftarrow \text{S VIDEO} \\ \leftarrow \text{LD} \\ \end{array}$$
 VIDEO 2
$$\begin{array}{c} \text{VIDEO 2} \\ \text{VIDEO 2} \\ \leftarrow \text{VHS} \\ \leftarrow \text{8 mm} \\ \leftarrow \text{BETA} \\ \downarrow \\ \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{S VIDEO} \\ \leftarrow \text{LD} \\ \end{array}$$
 VIDEO 3
$$\begin{array}{c} \text{VIDEO 3} \\ \text{VIDEO 3} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{LD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DVD} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DBS} \\ \leftarrow \text{DAS} \\ \leftarrow \text{DBS} \\ \leftarrow$$

6 Repeat steps 4 and 5 to label other input modes.

9

· If more than 90 seconds elapse before you press another button, the menu disappears automatically.

Setting Caption Vision (CAPTION VISION)

Some programs are broadcast with Caption Vision. To display Caption Vision, select either CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3, or TEXT4 from the menu. CC1, CC2, CC3, or CC4 shows you on-screen version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.) TEXT1, TEXT2, TEXT3, or TEXT4 shows you on-screen information presented using either half or the whole screen. It is not usually related to the program.



- 1 Press MENU.
- 2 Press ★ or ★ to select □ , and press ↔.







3 Press ♠ or ♦ to select the caption type, and press 🛨.







4 Press MENU to return to the original screen.

To display Caption Vision

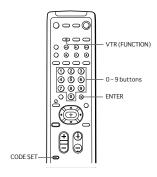
Press DISPLAY. (See page 20 for details.)

- · Poor reception of TV programs can cause errors in Caption
- Captions may appear with a white box or other errors instead
- of a certain word.
- · XDS, Caption Vision, and the status display cannot be used at
- For details on XDS, see page 20.

Operating video equipment

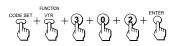
You can use the supplied remote control to operate Sony or non-Sony video equipment that has an infrared remote sensor. For this operation, set the manufacturer's code number.

Setting the manufacturer's code



Press the CODE SET, VTR (FUNCTION), and 0 - 9 buttons to enter the manufacturer's code number (see the chart on page 35-36), then

For example, to operate a Sony 8 mm VCR, press CODE SET, VTR (FUNCTION), 3, 0, 2, and



VCR manufacturer code numbers

VCR manufacturer code	numbers
Manufacturer	Code number
Sony	301, 302, 303
Aiwa	338
Audio Dynamic	314, 337
Bell & Howell (M. Wards)	330, 343
Brocsonic	319
Canon	309, 308 332
Citizen	
Craig Curtis Mathis	315, 302, 332 304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318
Fisher	330, 334, 335, 333
Funai	338
General Electric	329, 304, 309
Goldstar	332
Hitachi	306, 304, 305
Instant Replay	309, 308
JC Penny	309, 305, 304, 330, 314,
T. C	336, 337
JVC	314, 336, 337
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 333, 334, 330, 335
Magnavox	308, 309
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309 308
Pioneer Quasar	308, 309
RCA/PROSCAN	304, 305, 308, 309, 311,
RCA/ FROSCAIN	312, 313
Realistic	309, 330, 328, 335, 324,
	338
Sansui	314
Singer	315
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323,
	324, 325, 326
Sharp	327, 328
Shintom	315
Signature 2000 (M. Wards)	338, 327
Sylvania	308, 309, 338
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics Toshiba	309, 308
Wards	312, 311 327, 328, 335, 331, 332
Yamaha	330, 314, 336, 337
1 amand	330, 314, 330, 337

Zenith

MDP manufacturer code numbers

Manufacturer	Code number
Sony	701
Kenwood	707
Magnavox	703
Maranz	702
Mitsubishi	702
Panasonic	704
Philips	703
Pioneer	702
RCA	702
Sanyo	706
Sharp	705
Yamaha	703

Notes

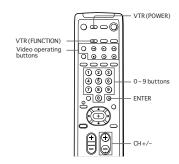
- · If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment . In some rare cases, you may not be able to operate your non-
- Sony video equipment with the supplied remote control. This is because your equipment may use a code that is not included with this remote control. In this case, please use the equipment's own remote control unit.
- · The code numbers for Sony equipment are assigned at the factory as follows:

VHS VCR	301 (preset code for the supplie remote control)
8 mm VCR	302

Beta, ED Beta VCRs 303

· Whenever you remove the batteries - to replace them, for example - if too much time is taken, the code number may revert to the factory setting and must be reset.

Operating video equipment



Use the video operating buttons on the remote control to operate the video equipment. Press VTR (FUNCTION) before operating the video equipment.

Operating a VCR	Buttons on the remote control
To turn on or off	Press VTR (POWER).
To select a channel directly	Press the 0 – 9 buttons.
To change channels	Press CH +/
To record	Press ► while pressing ●. First release ►, then release ●.
To play	Press ►.
To stop	Press ■.
To fast forward	Press ▶▶.
To rewind the tape	Press ◀◀.
To pause	Press II. To resume normal playback, press again.
To search the picture forward or backward	Press ▶ or ◀◀ during playback. To resume normal playback, release the button.
To change input mode	Press TV/VTR.

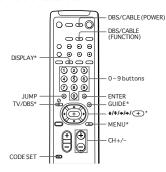
Operating an MDP	Buttons on the remote control
To turn on or off	Press VTR (POWER).
To play	Press ►.
To stop	Press ■.
To pause	Press II. To resume normal playback, press again.
To search the picture forward or backward	Keep pressing ► or ◀ during playback. To resume normal playback, release the button.
To search the chapter forward and backward	Press CH +/

Note

 If the video equipment does not have a certain function, the corresponding button on this remote control will not operate.

Operating a cable box or DBS receiver

You can program the supplied remote control to operate a cable box or DBS receiver. Follow the procedures below to set the manufacturer's code number in the remote control.



- * The TV/DBS, GUIDE, DISPLAY, \$/\$/\$/\$, and MENU buttons can be used only with a DBS receiver.
- 1 Turn off the equipment you want to set up, and press DBS/CABLE (FUNCTION).



2 Press the CODE SET, DBS/CABLE (FUNCTION). and 0 - 9 buttons to enter the manufacturer's code number (see the chart on the right column), then press ENTER. For example, to program your remote control to operate a Sony DBS receiver, press CODE SET, DBS/CABLE (FUNCTION), 8, 0, 1, and ENTER.



3 Press DBS/CABLE (POWER) to turn on the cable box or DBS receiver.



4 Use the cable box/DBS control buttons to check if the code number works. For example, to operate a cable box or DBS receiver. you can use the DBS/CABLE (POWER), JUMP, CH +/-. 0 - 9 and ENTER buttons.

· If the cable box or DBS receiver does not have a certain function, the corresponding button on this remote control will not operate.

To operate the projection TV

Press TV (FUNCTION). Then use the projection TV control buttons to control the projection TV.

For more details on operating the cable box or DBS receiver

Refer to the operating instructions that come with the equipment.

EN

If the remote control doesn't work

· First, try repeating the setup procedures using the other codes listed for your equipment

Manufacturer code numbers (cable box)

manufacturer cou	ie iluliibeis (cable box)
Manufacturer	Code number
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Manufacturer code numbers (DBS receiver)

Manufacturer	Code number
Sony	801 (preset code for the supplied remote control)
RCA	802

- · If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- · If you enter a new code number, the code number you
- previously entered at that setting is erased.
- · In some rare cases, your equipment may use a code that is not provided with this remote control and you may not be able to operate your equipment with the supplied remote control. In this case, use the equipment's own remote control unit.
- Whenever you remove the batteries to replace them, for example — if too much time is taken, the code numbers may revert to the factory setting and must be reset.

Troubleshooting

If the problem persists after trying the methods below, contact your nearest Sony dealer.

No picture (screen not lit), no sound

- → Make sure the power cord is connected securely.
- → Operate with the buttons on the projection TV. → Insert the batteries in the remote control with the correct polarity.
- → Replace the batteries with new ones if they are
- → Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching video tapes, set to VIDEO1, 2, or 3.
- → Try another channel. It could be station trouble → Perform AUTO SET UP again using the SETUP button to return to the factory preset condition.

Poor or no picture (screen lit), good sound

- → Adjust PICTURE in the VIDEO menu. (page 23) → Adjust BRIGHTNESS in the VIDEO menu
- (page 23)
- → Adjust convergence. (page 16)
 → Check antenna/cable connections. (page 6)
- → Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 14)
- Remove objects from the front of the projection TV.

Good picture, no sound

- → Press MUTING so that "MUTING" disappears from the screen. (page 19)
- → Check the MTS setting in the AUDIO menu.
- (page 27)

 → Make sure SPEAKER is set to ON in the AUDIO menu. (page 27)
- → Perform AUTO SET UP again using the SETUP button to return to the factory preset condition.

No color

- → Adjust the COLOR in the VIDEO menu. (page
- → Confirm that black and white program is not
- being broadcast.

 → Perform AUTO SET UP again using the SETUP button to return to the factory preset condition

Only snow and noise appear on the screen

- → Check the CABLE setting in the SET UP menu. (page 17)
- → Check the antenna/cable connections. (page 6) → Make sure the channel is broadcasting
- → Press ANT to change the input mode. (page 20)

Dotted lines or stripes

- → Adjust the antenna
- → Move the projection TV away from noise sources such as cars, neon signs, and hair-

Double images or ghosts

→ Use a highly directional outdoor antenna or a cable (when the problem is caused by reflections from nearby mountains or tall buildings).

- → If the item you want to choose appears in gray, you cannot select it. Press TV/VIDEO
- → Check the CABLE setting in the SET UP menu. (page 17)

Cannot receive upper channels (UHF) when using an

- → Make sure CABLE is OFF in the SET UP menu.
- (page 17)
 → Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 14, 18)

Cannot receive any channels when using

- → Make sure CABLE is ON in the SET UP menu.
- (page 17) → Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 14, 18)

- Remote control does not operate

 → Batteries could be weak. Replace the batteries. (page 13)
 - → Make sure the projection TV's power cord is connected securely to the wall outlet.
 - → Press TV (FUNCTION) when operating your projection TV.
 - → Are fluorescent lights too close to the projection TV? Move them at least 3-4 feet away from the projection TV.

Cannot gain enough volume when using a cable box

→ Increase the volume at the cable box. Then press TV (FUNCTION) and adjust the projection TV's volume.

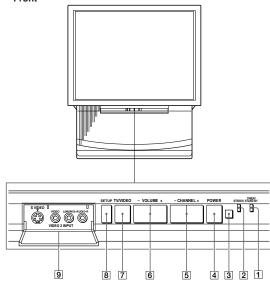
The projection TV needs to be cleaned

→ Clean the projection TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.

Index to parts and controls

This section briefly describes the buttons and controls on the projection TV and on the Remote control. For more information, refer to the pages next to each

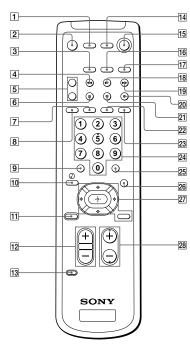
Projection TV — Front



- 1 TIMER/STANDBY indicator (pages 19, 30)
- 2 STEREO indicator (page 27)
- 3 Remote sensor
- 4 POWER switch (page 14)
- 5 CHANNEL +/- buttons (page 14)

- 6 VOLUME +/- buttons (page 14)
- 7 TV/VIDEO button (page 14, 15) 8 SETUP button (page 14)
- 9 S VIDEO/VIDEO 2 INPUT (VIDEO/AUDIO L(MONO)/R) jacks (page 10)

Remote control



1 VTR (POWER) switch (page 36)

2 MUTING button (page 19)

3 VTR (FUNCTION) button (page 35)

4 FREEZE button (page 22)

5 TV/VTR CH +/- buttons (Yellow labelled button) (page 21)

6 POSITION button (page 22)

7 DISPLAY button (page 20)

8 SLEEP button (page 20)

9 JUMP button (page 19)

10 TV/DBS © button (page 26, 37)

11 RESET button (page 23)

12 VOL (volume) +/- buttons (page 19)

13 CODE SET button (page 35)

14 DBS/CABLE (POWER) switch (page 37)

15 TV (POWER) switch (page 19)

16 DBS/CABLE (FUNCTION) button (page 37)

- 17 TV (FUNCTION) button (pages 15, 19)
- 18 SWAP button (page 22)
- 19 PIP button (page 21)
- 20 TV/VIDEO button (yellow labelled button) (page 21)
- 21 AUDIO button (page 21)
- 22 TV/VIDEO button (page 20)
- 23 ANT button (page 20)
- 24 0 9 buttons (page 16)
- 25 ENTER button (page 16)
- 26 MTS/GUIDE button (page 27, 37)
- 27 Menu operation buttons (page 15)

MENU button

↑/**♦**/**♦**/ buttons

button

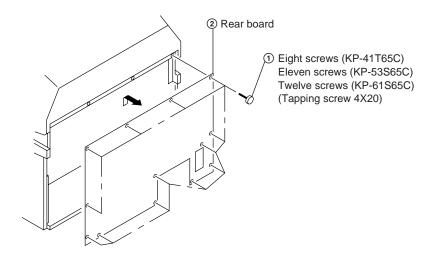
28 CH (channel) +/- buttons (pages 16, 19)

Additional Information |41-EN

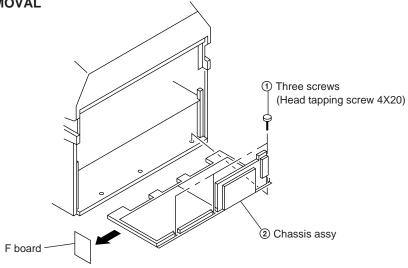
EN

SECTION 2 DISASSEMBLY

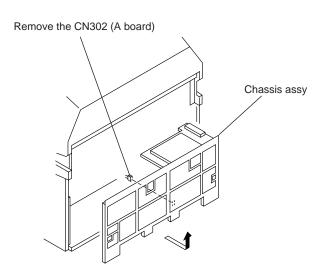
2-1. REAR BOARD REMOVAL



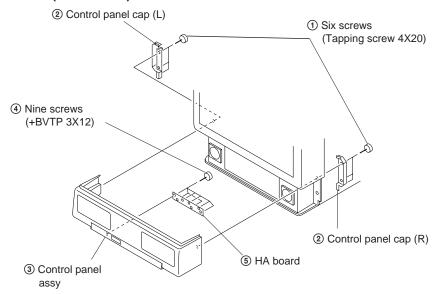
2-2. CHASSIS ASSY REMOVAL



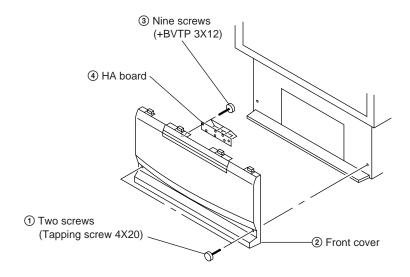
2-3. SERVICE POSITION

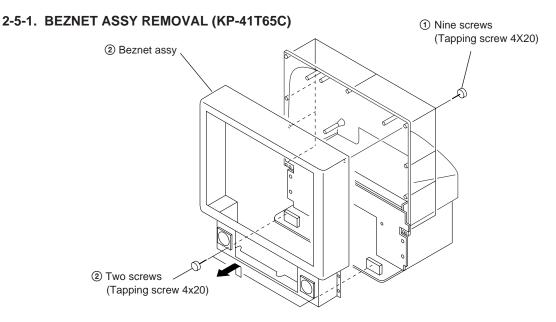


2-4-1. HA BOARD REMOVAL (KP-41T65C)

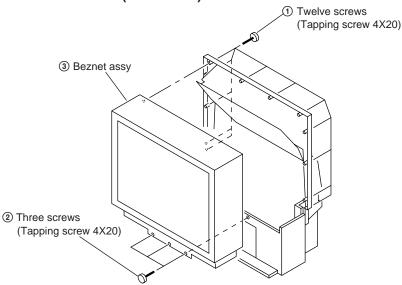


2-4-2. HA BOARD REMOVAL (KP-53S65C/61S65C)

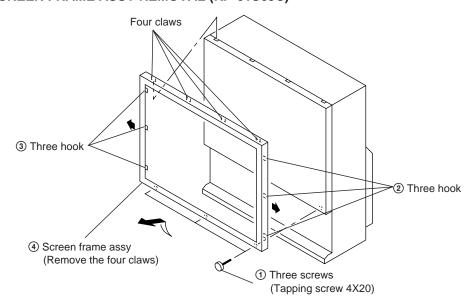




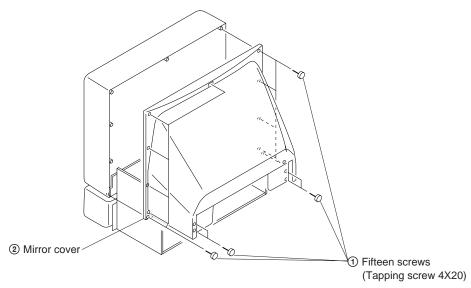
2-5-2. BEZNET ASSY REMOVAL (KP-53S65C)



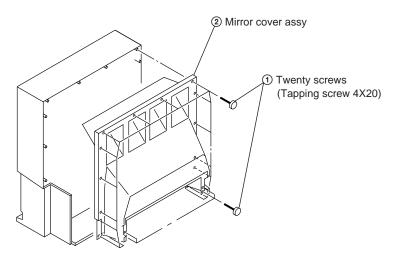
2-5-3. SCREEN FRAME ASSY REMOVAL (KP-61S65C)



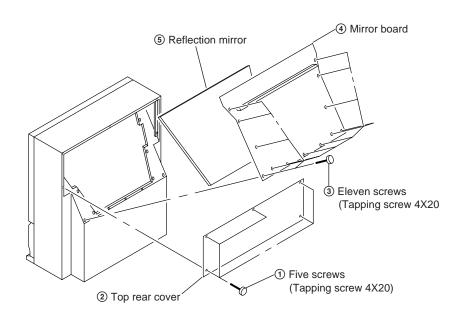
2-6-1. MIRROR COVER ASSY REMOVAL (KP-41T65C)



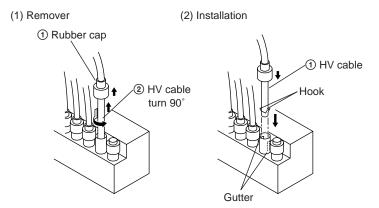
2-6-2. MIRROR COVER ASSY REMOVAL (KP-53S65C)



2-6-3. REFLECTION MIRROR REMOVAL (KP-61S65C)



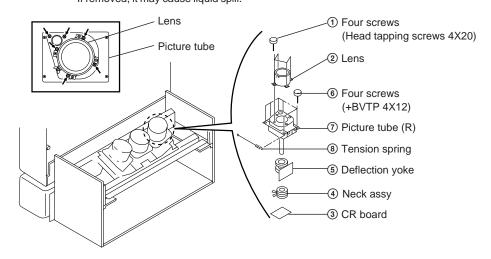
2-7. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL



2-8-1. PICTURE TUBE REMOVAL (KP-41T65C)

CAUTION: Removing the arrow-marked screws is strictly prohibited.

If removed, it may cause liquid spill.



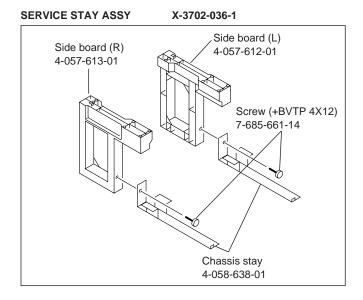
2-8-2. PICTURE TUBE REMOVAL (KP-53S65C/61S65C)

CAUTION:Removing the arrow-marked screws is strictly inhibited.

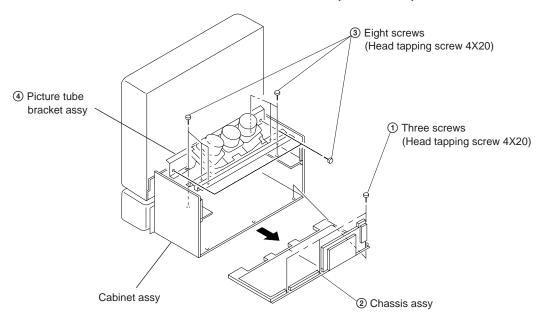
If removed, it may cause liquid spill.

① Four screws (Head tapping screws 4X20)
② Lens
② Lens
④ Four screws (+BVTP 4X12)
⑦ Picture tube (R)
④ Tension spring
⑤ Deflection yoke
④ Neck assy
③ CR board

2-9-1. SERVICE STAY ASSY HOW TO USE AND CARRY BACK SERVICE STAY ASSY.



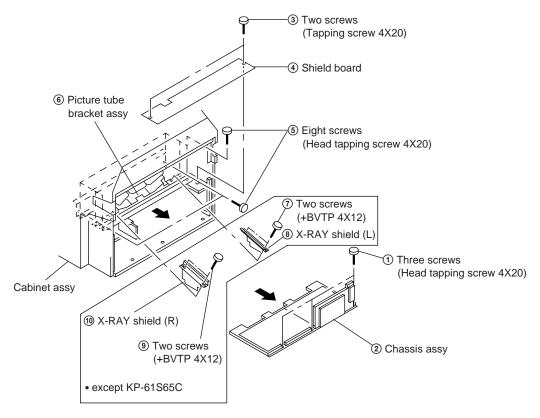
2-9-2. PICTURE TUBE BRACKET ASSY REMOVAL (KP-41T65C)



- 1) Remove ① three screws (head tapping screw 4X20) and pull out ② chassis assy from cabinet assv.
- 2) Remove ③ eight screws (head tapping screw 4X20) and release ④ picture tube bracket assy from cabinet assy.

2-9-3. PICTURE TUBE BRACKET ASSY REMOVAL (KP-53S65C/61S65C)

- Disassemble HA board and speaker cord.
- Disassemble all the harness from purse lock.

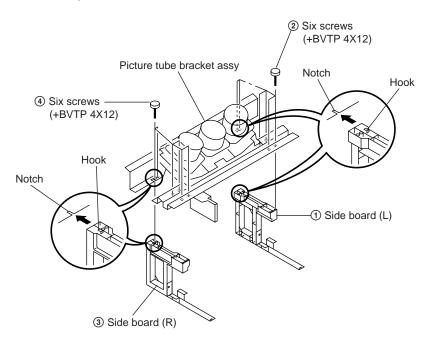


- 1) Remove ① three screws (head tapping screw 4X20) and pull out ② chassis assy from cabinet assy.
- 2) Remove ③ two screws (tapping screw 4X20) and remove ④ shield board.
- 3) Remove (§) eight screws (head tapping screw 4X20) and release (§) picture tube bracket assy from cabinet assy.

 - 5) Remove (a) two screws (+BVTP 4X12) and remove (b) X-RAY shield (R).

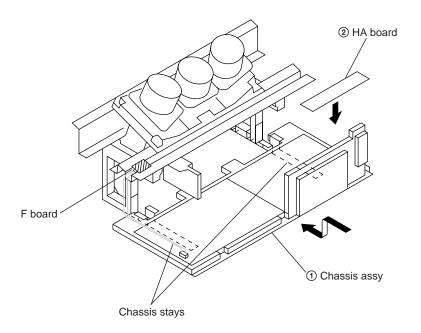
 except KP-61S65C

2-9-4. SETTING OF SERVICE STAY ASSY. (KP-41T65C/53S65C)



- 1) Lift up picture tube bracket assy and fit the hook of ① side board (L) to the notch on the assy. Then fix then with ② six screws (+BVTP 4X12).
- 2) Lift up picture tube bracket assy and fit the hook of ③ side board (R) to the notch on the assy. Then fix then with ④ six screws (+BVTP 4X12).

2-9-5. INSTALL A CHASSIS ASSY



- 1) Put ① chassis assy on chassis stays.
- 2) Put ② HA board on ① chassis assy.
- 3) Put HV bracket on ① chassis assy. (KP-41T65C only)
- 4) Temporarily install the F Board on the CRT bracket.
- 5) You can carry the chassis assy in this condition.

SECTION 3 SET-UP ADJUSTMENTS

3-1. SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT)

- 1. Receive the Monoscope signal.
- 2. Set 50% BRIGHTNESS and minimum PICTURE.
- Turn the red VR on the FOCUS block all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
- Next gradually turn it to the left to the position where the retrace line disappears.

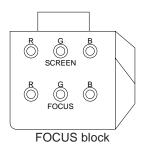


Fig. 3-1

3-2. FOCUS LENS ADJUSTMENT

- 1. Loose the lens screw.
- 2. Set in service mode.
- Use VP on the service mode menu to shown only the green color
- 4. Press the Commander Menu button and select FEATURES and CONVERGENCE to display the test signal (crosshatch) on the screen.
- 5. Rotate the green lens and align with the optimal focus point from the test signal.
- Use RG-RH from the service mode menu to set to green and red.
- Output the test signal and rotate the red lens to obtain the optimum focus at the point where the red and green spots overlap.
- Use RG-BH from the service mode menu to set to red and blue.
- 9. Output the test signal and rotate the blue lens to obtain the optimum focus at the point where the blue and red spots overlap.
- 10. Tighten the lens screw.

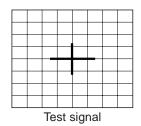


Fig. 3-2

3-3. SCREEN (G2) ADJUSTMENT

- 1. Select VIDEO mode without signals.
- 2. Connect an oscilloscope to the TP701(KR), TP731(KG) and TP761(KB) of CR board, CG board and CB board.
- 3. Adjust R, G and B screen voltage to 170 173V with screen VR on the focusblock.

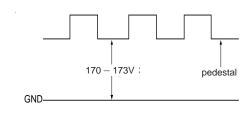
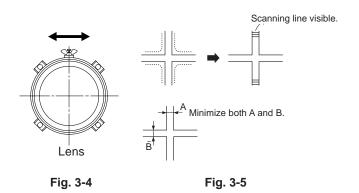


Fig. 3-3

3-4. FOCUS VR ADJUSTMENT

- 1. Set in service mode.
- 2. Use VP on the service mode menu to shown only the green color.
- 3. Press the Commander Menu button (convergence) and output the test signal (crosshach).
- 4. Rotate the green VR on the FOCUS block and align to obtain the optimal focus point.
- Use RG-RH from the service mode menu to set to green and red.
- 6. Output the test signal and rotate the red VR to obtain the optimum focus at the point where the red and green spots overlap.
- 7. Use RG-BH from the service mode menu to set to red and blue
- 8. Output the test signal and rotate the blue VR aligning to obtain the optimum focus at the point where the blue and green spots overlap.



3-5. DEFLECTION YOKE TILT ADJUSTMENT

- 1. Set to receive the Monoscope signal.
- Set in service mode.
- 3. Use VP on the service mode menu to show only the green color
- 4. Loosen the deflection yoke set screw and align the tilt of the Deflection Yoke so that the bars at the center of the monoscope pattern are horizontal.
- 5. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
- 6. The tilt of the deflection yoke for red is aligned with RG-RH on the service mode menu, and the tilt on the deflection yoke for biue is aligned with RG-BH on the service menu, is aligned the same as was done for green.

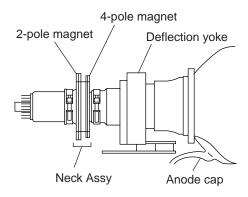


Fig. 3-6

3-6. 2-POLE MAGNET ADJUSTMENT

- 1. Set in service mode.
- 2. Set to receive the Dot signal.
- Place the caps on the red and blue lens so that only the green color is shown.
- 4. Turn the green VR on the focus block to the right and set to overfocus to enlarge the spot.
- 5. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the Just Focus spot.
- 6. Align the green focus VR and set for just (precise) focus.
- 7. Perform the same alignment for red and blue.

Use the center dot

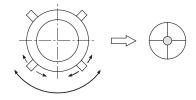


Fig. 3-7

3-7. 4-POLE MAGNET ADJUSTMENT

- 1. Set in service mode.
- 2. Set to receive the Dot signal.
- 3. Remove CN302 connector for A board
- Place the caps on the red and blue lens so that only the green color is shown.
- 5. Turn the green VR on the focus block to the left and set to underfocus to enlarge the spot.
- Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle.
- 7. Perform the same alignment for red and blue.

Use the center dot

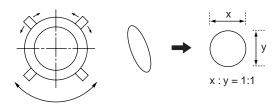


Fig. 3-8

3-8. DEFOCUS ADJUSTMENT (Blue)

- 1. Receive the crosshatch signal
- 2. Adjust the FOCUS knob so that the crosshatch pattern vertical line width is as in the figure on the right.
- 3. Blue only defocus Adjustment.

[Focus adjustment point]

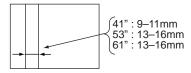


Fig. 3-9

3-9. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

2. MEMORY WRITE CONFIRMATION METHOD

- 1. After adjustment, remove the plug from AC outlet, and then replace the plug in AC outlet again.
- 2. Turn the power switch ON and set to Service Mode.
- 3. Call the adjusted items again and confirm they were adjusted.

By using Remote Commander (RM-Y136A), all circuit adjustments can be made.

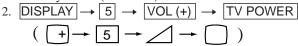
NOTE: Test Equipment Required.

- 1. Pattern Generator
- 2. Frequency counter
- 3. Digital multimeter
- 4. Audio oscillator

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

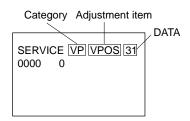
1. Standby mode. (Power off)



on the Remote Commander.

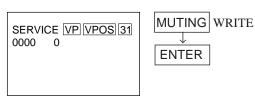
(Press each button within a second.)

SERVICE MODE ADJUSTMENT



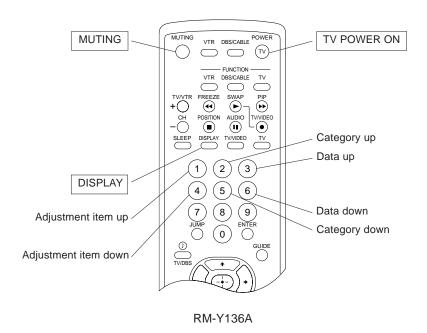
- 3. The CRT displays the item being adjusted.
- 4. Press 1 or 4 on the Remote Commander to select the item.
- 5. Press **3** or **6** on the Remote Commander to change the data.
- 6. Press 2 or 5 on the Remote Commander to select the category.
- 7. If you want to recover the latest values press 7 then ENTER to read the memory.
- 8. Press MUTING then ENTER to write into memory.

SERVICE MODE ADJUSTMENT



- 8. Press 8 then ENTER on the Remote Commander to initialize.
- 9. Turn set off and on to exit.

3. ADJUST BUTTONS AND INDICATOR



4. SERVICE MODE LIST

VΡ

Category	Adjustment item	Standard data	Data range	Note
VP	VPOS		0-63	V SHIFT
	VSIZ		0-63	V SIZE
	VCOM	0	0-3	HV-COMP-V
	VLIN	7	0-15	V LIN
	VSCO	7	0-15	S CORRECTION
	HPOS	7	0-15	H SHIFT
	HSIZ		0-63	H SIZE
	PAMP		0-63	PIN AMP
	UPIN	7	0-15	UPPER CORNER PIN
	LPIN	7	0-15	LOWER CORNER PIN
	PPHA	7	0-15	H TRAPEZOID
	AFC	2	0-3	AFC LOOP GAIN
	VBOW	7	0-15	V BOW
	VANG	7	0-15	V ANGLE
	REF	3	0-3	AKB REFERENCE
	GDRV		0-63	GREEN DRIVE
	BDRV		0-63	BLUE DRIVE
	GCUT		0-15	GREEN CUT OFF
	BCUT		0-15	BLUE CUT OFF
	SCON		0-15	SUB CONTRAST
	SHUE		0-15	SUB HUE
	SCOL		0-15	SUB COLOR
	SBRT		0-63	SUB BRIGHTNESS
	SSHP	7	0-15	SUB SHARPNESS
	GMMA	0	0-3	GAMMA LEVEL
	CDM2	0	0,1	COUNT DOWN MODE 2
	DPIX	1	0,1	DYNAMIC PICTURE
	Y-DC	1	0,1	DC TRANSMISSION RATIO
	ABLM	1	0,1	ABL MODE
	AXIS	0	0,1	R-Y, G-Y AXIS
	NOTC	0	0,1	C TRAP
	CROM	7	0-15	C TRAP F0
	TOT	0	0,1	C TOT FILTER
	PREL	3	0-3	PRE/OVER LEVEL
	SHPF	2	0-3	SHARPNESS F0
	RON		0,1	RED ON/OFF
	GON		0,1	GREEN ON/OFF
	BON		0,1	BLUE ON/OFF
	DCOL		0,1	DYNAMIC COLOR
	CDMD	0	0,1	V COUNT DOWN
	LBLK	13	0-15	H BLK WIDTH LEFT SIDE
	RBLK	13	0-15	H BLK WIDTH RIGHT SIDE

ΑP

Category	Adjustment item	Stan- da		Data range	Note
	nem	41T	V	range	
AP	SVOL	0	0	0-15	SUB VOLUME
	SBAL	7	7	0-15	SUB BLANCE
	SBAS	9	7	0-15	SUB BASS
	STRE	6	7	0-15	SUB TREBLE

RG

Category	Adjustment item	Standard data	Data range	Note
RG	GH CENT		-127- +127	GREEN H SENT
	GH SKEW		-127-+127	GREEN H SKEW
	GH BOW		-127-+127	GREEN H BOW
	GH 4BOW		-127-+127	GREEN H 4TH BOW
	GH SIZE		-127-+127	GREEN H SIZE
	GH LIN		-127-+127	GREEN H LINEARITY
	GH MSIZ		-127-+127	GREEN H MID SIZE
	GH MLIN		-127-+127	GREEN H MID LINEARITY
	GH KEY		-127-+127	GREEN H KEY
	GH SSKW		-127-+127	GREEN H SUB SKEW
	GH MPIN		-127-+127	GREEN H MID PIN
	GH PIN		-127-+127	GREEN H PIN
	GH SBOW		-127-+127	GREEN H SUB BOW
	GH MBOW		-127-+127	GREEN H MID BOW
	GH 4PIN		-127-+127	GREEN H 4TH PIN
	GH 4SBO		-127-+127	GREEN H 4TH SUB BOW
	GV CENT		-127-+127	GREEN V CENT
	GV SKEW		-127-+127	GREEN V SKEW
	GV BOW		-127-+127	GREEN V BOW
	GV SIZE		-127-+127	GREEN V SIZE
	GV LIN		-127-+127	GREEN V LINEARITY
	GV MSIZ		-127-+127	GREEN V MID SIZE
	GV MKEY		-127-+127	GREEN V MID KEY
	GV KEY		-127-+127	GREEN V KEY
	GV SSKW		-127-+127	GREEN V SUB SKEW
	GV MPIN		-127-+127	GREEN V MID PIN
	GV PIN		-127-+127	GREEN V PIN
	GV SBOW		-127-+127	GREEN V SUB BOW
	GV WAVE		-127-+127	GREEN V WAVE
	GV 4PIN		-127-+127	GREEN V 4TH PIN
	RH CENT		-95-+96	RED H CENT
	RH SKEW		-127-+127	RED H SKEW
	RH BOW		-127-+127	RED H BOW

Category	Adjustment item	Standard data	Data range	Note
RG	RH 4BOW		-127-+127	RED H 4TH BOW
	RH SIZE		-127-+127	RED H SIZE
	RH LIN		-127-+127	RED H LINEARITY
	RH MSIZ		-127-+127	RED H MID SIZE
	RH MLIN		-127-+127	RED H MID LINEARITY
	RH KEY		-127-+127	RED H KEY
	RH SSKW		-127-+127	RED H SUB SKEW
	RH MPIN		-127-+127	RED H MID PIN
	RH PIN		-127-+127	RED H PIN
	RH SBOW		-127-+127	RED H SUB BOW
	RH MBOW		-127-+127	RED H MID BOW
	RH 4PIN		-127-+127	RED H 4TH PIN
	RH 4SBO		-127-+127	RED H 4TH SUB BOW
	RV CENT		-95-+96	RED V CEVT
	RV SKEW		-127-+127	RED V SKEW
	RV BOW		-127-+127	RED V BOW
	RV SIZE		-127-+127	RED V SIZE
	RV LIN		-127-+127	RED V LINEARITY
	RV MSIZ		-127-+127	RED V MID SIZE
	RV MKEY		-127-+127	RED V MID KEY
	RV KEY		-127-+127	RED V KEY
	RV SSKW		-127-+127	RED V SUB SKEW
	RV MPIN		-127-+127	RED V MID PIN
	RV PIN		-127-+127	RED V PIN
	RV SBOW		-127-+127	RED V SUB BOW
	RV WAVE		-127-+127	RED V WAVE
	RV 4PIN		-127-+127	RED V 4TH PIN
	RV WING		-31-+32	RED V WING
	BH CENT		-95-+96	BLUE H CENT
	BH SKEW		-127-+127	BLUE H SKEW
	BH BOW		-127-+127	BLUE H BOW
	BH 4BOW		-127-+127	BLUE H 4TH BOW
	BH SIZE		-127-+127	BLUE H SIZE
	BH LIN		-127-+127	BLUE H LINEARITY
	BH MSIZ		-127-+127	BLUE H MID SIZE
	BH MLIN		-127-+127	BLUE H MID LINEARITY
	BH KEY		-127-+127	BLUE H KEY
	BH SSKW		-127-+127	BLUE H SUB SKEW
	BH MPIN		-127-+127	BLUE H MID PIN
	BH PIN		-127-+127	BLUE H PIN
	BH SBOW		-127-+127	BLUE H SUB BOW
	BH MBOW		-127-+127	BLUE H MID BOW

Category	Adjustment item	Standard data	Data range	Note
RG	BH 4PIN		-127-+127	BLUE H 4TH PIN
	BH 4SBO		-127-+127	BLUE H 4TH SUB BOW
	BV CENT		-95-+96	BLUE V CENT
	BV SKEW		-127-+127	BLUE V SKEW
	BV BOW		-127-+127	BLUE V BOW
	BV SIZE		-127-+127	BLUE V SIZE
	BV LIN		-127-+127	BLUE V LINEARITY
	BV MSIZ		-127-+127	BLUE V MID SIZE
	BV MKEY		-127-+127	BLUE V MID KEY
	BV KEY		-127-+127	BLUE V KEY
	BV SSKW		-127-+127	BLUE V SUB SKEW
	BV MPIN		-127-+127	BLUE V MID PIN
	BV PIN		-127-+127	BLUE V PIN
	BV SBOW		-127-+127	BLUE V SUB BOW
	BV WAVE		-127-+127	BLUE V WAVE
	BV 4PIN		-127-+127	BLUE V 4TH PIN
	BV WING		-31-+32	BLUE V WING

CC

Category	Adjustment item	Standard data	Data range	Note
CC	CRIH	9	0-15	CRI COUNT HIGH
	CRIL	2	0-15	CRI COUNT LOW
	CFLD	5	0-15	FIXED FIELD COUNT
	CCDI	3	0-7	NO CCD INT COMPARE
	CRIP	4	0-7	CRI & PARITY ERROR
	CRIT	2	0-3	CRI TIME CONSTANT
	CSB1	3	0-3	SYNC SLICE BIAS 1
	CSB2	4	0-7	SYNC SLICE BIAS 2
	CCBD	4	0-15	C SYNC BACKPORCH DET
	CCFD	7	0-15	C SYNC FRONTPORCH DET
	CREP	142	0-255	CRI SIGNAL END POSITION
	CSEP	186	0-255	START BIT END POSITION
	CRBD	8	0-15	CRI BACKPORCH DET
	CRFD	9	0-15	CRI FRONTPORCH DET
	CSSD	3	0-15	STROBE WINDOW ST DLY
	CSED	9	0-15	STROBE WINDOW ED DLY
	CSBS	12	0-31	START BIT THRESHOLD
	CDSD	8	0-31	DATA START DELAY
	CCDS	9	0-31	CAPTION DT THRESHOLD
	CHMK	42	0-63	H SYNC MASK WIDTH
	CHSY	136	0-255	H SYNC VCO COUNT

OP

Category	Adjustment item	Standard data	Data range	Note
OP	DISP		0-63	OSD POSITION
	PDPS		0-255	FAV/IDX CH POSITION
	PDPO		0-7	CH POSITION (OFF SET)

ID

Category	Adjustment item	Standard data	Data range	Note
ID	ID0	25	0-255	MODEL ID#0
	ID1	55	0-255	MODEL ID#1
	ID2	31	0-255	MODEL ID#2
	ID3	1	0-255	MODEL ID#3
	ID4	155	0-255	MODEL ID#4
	ID5	177	0-255	MODEL ID#5
	ID6	198	0-255	MODEL ID#6
	ID7	66	0-255	MODEL ID#7

PP

Category	Adjustment item	Standard data	Data range	Note
PP	BGHP	-	0-15	PIP H POSITION
	BGVP	-	0-15	PIP V POSITION
	MAHP	-	0-15	P&P MAIN H AQUISITION
	MAVP	-	0-255	P&P MAIN V AQUISITION
	SAHP	-	0-15	P&P SUB H AQUISITION
	SAVP	-	0-255	P&P SUB V AQUISITION
	DECS	-	0-31	S DECODER REGISTERS
	DECM	-	0-31	M DECODER REGISTERS
	DIS	-	0-127	DISPLAY SETTING
	BSIZ	-	0-15	BORDER SIZE
	6BIT	-	0-3	6bit (SMART6/SKIP6)
	VPED	-	0-15	V OFFSET
	UPED	-	0-15	U OFFSET

PS

Category	Adjustment item	Standard data	Data range	Note
PS	PIPH		0-127	PIP H POSITION
	PIPV		0-63	PIP V POSITION
	PMVD	26	0-31	PIP V PULSE DELAY(M)
	PIVD	22	0-31	PIP V PULSE DELAY(I)
	PCON		0-15	PIP CONTRAST(I)

1
37
I

Category	Adjustment item	Standard data	Data range	Note
PS	FRMY	7	0-15	PIP FRAME Y LEVEL
	IPER	0	0-15	PIP PEDESTAL R-Y(I)
	IPEB	0	0-15	PIP PEDESTAL B-Y(I)
	IHUE		0-15	PIP SUB HUE
	ICOL		0-15	PIP SUB COLOR
	PHDL	1	0-15	PIP H PULSE DELAY
	PYSD	1	0-15	PIP SELECT DELAY
	PYDL	0	0-7	PIP Y DELAY
	PCPS	0	0,1	PIP CLP
	PCPF	0	0,1	PIP CLP CYCLES
	PSEL	0	0,1	PIP SELDOWN
	PPLL	0	0-3	PIP PLL
	CHRI	0	0,1	PIP INPUT POLARITY
	CHRO	0	0,1	PIP OUTPUT POLARITY

MC

Category	Adjustment item	Standard data	Data range	Note
MC	MSCN	-	0-15	P&P MAIN SUB CONTRAST
	MSHU	-	0-15	P&P MAIN SUB HUE
	MSCL	-	0-15	P&P MAIN SUB COLOR
	MUPD	-	0-15	P&P MAIN U OFFSET
	MVPD	-	0-15	P&P MAIN V OFFSET
	MDLY	-	0-3	P&P MAIN Y DELAY
	MBGR	-	0-3	P&P MAIN SCP CONTROL(1)
	MBGF	-	0-3	P&P MAIN SCP CONTROL(2)

IC

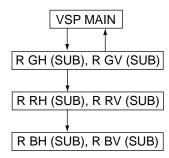
Category	Adjustment item	Standard data	Data range	Note
IC	SSCN	6	0-15	P&P SUB SUB CONTRAST
	SSHU	-	0-15	P&P SUB SUB HUE
	SSCL	-	0-15	P&P SUB SUB COLOR
	SUPD	-	0-15	P&P SUB U OFFSET
	SVPD	-	0-15	P&P SUB V OFFSET
	SDLY	0	0-3	P&P SUB Y DELAY
	SBGR	3	0-3	P&P SUB SCP CONTROL(1)
	SBGF	3	0-3	P&P SUB SCP CONTROL(2)
	PAFC	2	0-3	PIP AFC LOOP GAIN
	PTOT	0	0,1	PIP CHROMA TOT FILTER
	PYDR	10	0-31	PIP Y DRIVE
	PYDC	3	0-7	PIP DC TRAN

Category	Adjustment item	Standard data	Data range	Note
IC	PSHP	1	0,1	PIP SHARPNESS F0
	PDPI	0	0,1	PIP DYNAMIC PICTURE
	PSYS	0	0-3	PIP COLOR SYSTEM
	PXTL	0	0-3	PIP X' TAL
	PLOP	0	0-3	PIP COLOR LOOP

3-10. CONVERGENCE ADJUSTMENT

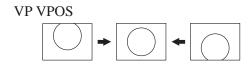
• When replacing the deflection yoke, always perform "DEFLECTION YOKE TILT ADJUSTMENT" before adjusting the convergence.

Adjustment procedure



[GREEN REGISTRATION ADJUSTMENT]

V-SHIFT adjustment

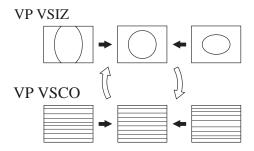


V-LINEARITY adjustment

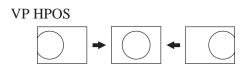


• V-SIZE, V-CORRECTION adjustment

While tracking, adjust so that the lattice intervals for VSIZ and VSCO are equal.

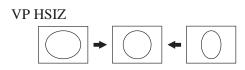


• H-SHIFT adjustment



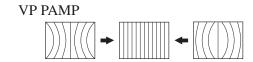
• H-SIZE adjustment

Finely adjust with SUB MSIZ.



• PIN-AMP adjustment

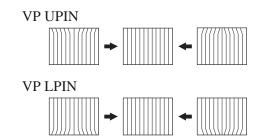
Finely adjust with SUB MPIN.



• UPPER/LOWER-CORNER PIN adjustment

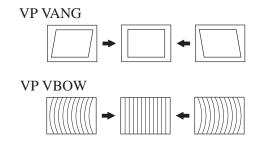
Correct the screens top and bottom bow line. However, if this adjustment is overdone, distortion may occur with the PIN-AMP adjustment that can not be re-adjusted.

Note: The PIN-AMP adjusts the overall screen from top to bottom, but the UPPER/LOWER-CORNER PIN adjustments have large movement in the top and bottom sections, so be careful.



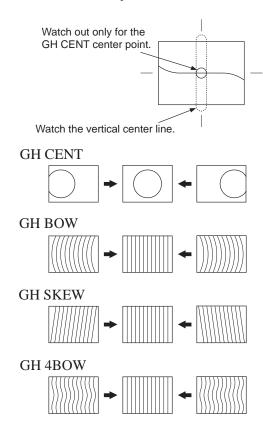
· V-ANGLE, V-BOW adjustment

Correct the tilt and bow of the vertical line at the center of the screen.



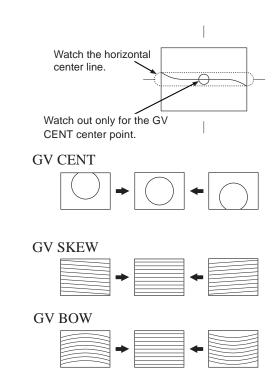
[GREEN SUB ADJUSTMENT] SCREEN CENTER SECTION GREEN VERTICAL LINE ADJUSTMENT

- Finely adjust with GH CENT, GH BOW, GH SKEW.
 Adjust by watching out for the GH CENT screen center section.
- RGH 4TH BOW adjustment
 Correct the corner distortion that could not be adjusted away with the GH 4BOW adjustment.



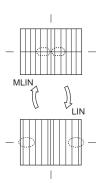
SCREEN CENTER SECTION GREEN HORIZONTAL LINE ADJUSTMENT

- 1. Finely adjust the center position of the vertical line at the center of the screen with GV CENT.
- 2. Correct the tilt and bow of the horizontal line at the center of the screen with GV SKEW and GV BOW.



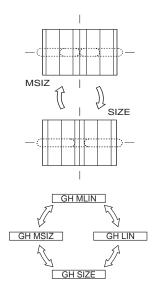
GREEN SIZE AND LINEARITY ADJUSTMENT

- 1. Balance the sizes at both sides of the center section of the screen with RGH MLIN.
- 2. Balance the sizes on both end sections of the screen with RGH LIN.
- 3. While tracking, adjust with RGH MLIN and RGH LIN so that the sizes of the horizontal line at the center of the screen are symmetrical left and right.



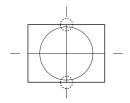
GREEN HORIZONTAL SIZE ADJUSTMENT

- Adjust with RGH MSIZE so that the sizes of both ends and of both sides of the center section of the screen are equal.
- 2. Adjust with GH SIZE so that the horizontal sizes of both ends and of both sides of the center section of the screen are equal.
- 3. While tracking, adjust with GH MSIZ and GH SIZE so that the lattice intervals for the horizontal line section of the center section of the screen are equal and so that the horizontal size is the prescribed value.
- 4. If M LIN is changed when the GH MSIZ and GH SIZE adjustment is complete, adjust again while tracking.
- With just the H SIZE adjustment in MAIN, if there is no need to adjust RGH SIZE in SUB this can save power.



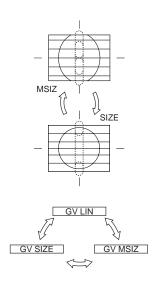
GREEN VERTICAL LINEARITY ADJUSTMENT

 Adjust GV LIN so that the vertical lines at the top and bottom of the screen are symmetrical.



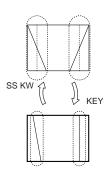
GREEN VERTICAL SIZE ADJUSTMENT

- Adjust with GV MSIZE so that the sizes for the top and bottom sections of the screen and for both sides of the center section of the screen are equal.
- 2. Set the vertical size to the prescribed value with GV SIZE.
- 3. Adjust GV MSIZ and GV SIZE watching the vertical line at the center section of the screen.
- 4. While tracking, adjust with GV MSIZ and GV SIZE so that the lattice intervals for the vertical line section of the center section of the screen are equal and so that the vertical size is the regulation value.
- 5. If GV LIN is out of place when the GV MSIZ and GV SIZE adjustment is complete, adjust again while tracking.
- If there is no need to adjust GV SIZE in SUB with just the V SIZE adjustment in MAIN, this can save power.



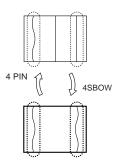
GREEN HORIZONTAL TRAPEZOIDAL DISTORTION ADJUSTMENT

- 1. Adjust with GH SSKW so that the tilt of the vertical lines at both ends of the screen is symmetrical left and right.
- 2. Adjust with GH KEY so that there is no tilt in the vertical lines at both ends of the screen.
- 3. If there is a tilt on either the left or right after the GH KEY adjustment, adjust while tracking.



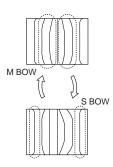
GREEN HORIZONTAL QUATERNARY ADJUSTMENT

- 1. Correct the quaternary distortion with GH 4PIN.
- 2. While balancing, correct the quaternary distortion of both end sections of the screen with GH 4SBOW.
- 3. While tracking, adjust with GH 4PIN and RGH 4SBOW.



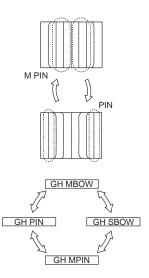
GREEN HORIZONTAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

- 1. Adjust with GH MBOW so that the pin asymmetry at both sides of the center section of screen is symmetrical.
- 2. Adjust with GH SBOW so that the bow at both end sections of the screen is symmetrical left and right.
- While tracking, adjust with GH MBOW and GH SBOW so that the bow of vertical lines on the entire screen is symmetrical left and right.



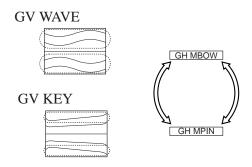
GREEN HORIZONTAL SYMMETRICAL PIN DISTORTION ADJUSTMENT

- 1. Adjust the pin distortion at both sides of the center section of the screen with GH MPIN.
- Adjust the pin distortion at both end sections of the screen with GH PIN.
- 3. While tracking, adjust with GH MPIN and GH PIN so that the PIN of vertical lines on the entire screen have no bowing.
- If there is asymmetrical pin distortion after the GH MPIN and GH PIN adjustments, adjust with GH MBOW and GH SBOW while tracking.
- With just the PIN AMP adjustment in MAIN, if there is no need to adjust GV PIN in SUB, this can save power.



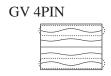
GREEN VERTICAL WAVE (TERTIARY DISTORTION) ADJUSTMENT

- 1. Take the screen top and bottom horizontal lines with GV WAVE and find the secondary and quaternary waveform.
- 2. There is KEY distortion after the GV WAVE adjustment, so adjust with RGV WAVE and RGV KEY while tracking.



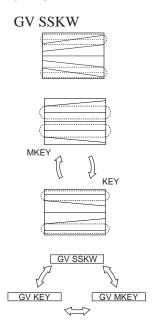
GREEN VERTICAL QUATERNARY DISTORTION ADJUSTMENT

- 1. Correct the quaternary distortion of the horizontal lines at the top and bottom sections of the screen with GV 4PIN.
- Since there is no 4SBOW for vertical correction, there will be a slight imbalance, but adjust to eliminate the distortion from the horizontal line at either the top or the bottom of the screen
- 2) In many cases, the horizontal lines at the top and bottom sections of the screen are not straight lines after the adjustment. As long as the secondary distortion is mild enough that it can be corrected with the PIN adjustment, this is OK.



GREEN VERTICAL TRAPEZOIDAL DISTORTION ADJUSTMENT

- Adjust with GV SSKW so that the tilt of the horizontal lines at the top and bottom sections of the screen is symmetrical about the center position horizontal line.
- 2. Adjust with GV MKEY so that there is no tilt for the line sections at both sides of the horizontal lines at the center section of the stream.
- 3. Adjust with GV KEY so that there is no tilt for the horizontal lines at the top and bottom sections of the screen.
- 4. While tracking, adjust with GV MKEY and GV KEY so that there is no tilt for the horizontal lines on the entire screen.
- If the tilt is unbalanced after the GV MKEY and GV KEY adjustment, adjust again with GV SSKW.



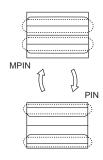
GREEN VERTICAL ASYMMETRICAL PIN DISTORTION (SECONDARY DISTORTION) ADJUSTMENT

Correct the asymmetrical pin distortion at the top and bottom sections of the screen with RGV SBOW.



GREEN VERTICAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT

- 1. Adjust the pin distortion for both side sections and the center of the screen with GV MPIN.
- 2. Adjust with GV PIN so that the horizontal lines at the top and bottom sections of the screen are straight lines.
- 3. Adjust with GV MPIN and GV PIN so that there is no curve in the horizontal lines on the entire screen.
- 4. After the adjustments in Items 1-3, adjust the tracking with GV SBOW, GV MPIN, and GV PIN.





GREEN AND RED REGISTRATION ADJUSTMENT (RRH, RRV)

- 1. Receive a cross-hatch signal.
- Adjust so that the red lines lay on the green lines.Adjust with the same procedure as the GREEN SUB adjustment.

Notes: 1. The main correction is not carried out during red registration adjustment.

- 2. Beware. The green adjustment items can be changed by mistake.
- 3. Unlike for green, adjust within the range -127 $\sim +128$.

GREEN AND BLUE REGISTRATION ADJUSTMENT (RBH, RBV)

- 1. Receive a cross-hatch signal.
- 2. Adjust so that the blue and green lines are on top of each other.

Notes: 1. The main correction is not carried out during RED registration adjustment.

2. Beware. The GREEN and RED adjustment items can be changed by mistake.

3-11. AGC ADJUSTMENT

- 1. Receive an off-air signal.
- Adjust the AGC VR (TU 1001) so that there is no snow noise and cross-modulation.

3-12. WHITE BALANCE ADJUSTMENT

- 1. Receive the monoscope pattern signal and adjust the picture quality with the menu.
- 2. Adjust service mode SBRT so that the signal 10 IRE section barely glows.
- 3. Receive the all-white pattern signal.
- 4. Adjust the white balance with service mode GCUT and BCUT.
- 5. Adjust service mode SBRT so that the signal 100 IRE section barely glows.
- Adjust the white balance with service mode GAMP and BAMP.
- 7. Repeatedly adjust the white balance for the minimum and maximum picture settings.

SECTION 4 SAFETY RELATED ADJUSTMENTS

[GBOARD]

4-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with \square on the schematic diagram always check HV regulation, and if necessary re-adjust.

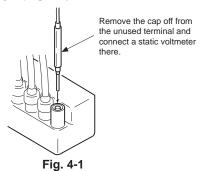
★: C514☐: C514, C515, C516IC651T502,T503, T504 (FBT)D.Y

OPERATION CHECK

- Connect a HV static voltmeter to the unconnected plug of the high-voltage block. (Fig.4-1)
- 2. Power on the set.
- 3. Receive the dot signal. (PICTURE and BRIGHTNESS to minimum)
- 4. Check that the HV static voltmeter is reading 31.00±1.0kVdc.

HV Regulation adjustment

- 1. Connect a HV static voltmeter to the unconnected plug of the hight-voltage block.
- 2. Power on the set.
- Receive the dot signal. (PICTURE and BRIGHTNESS to minimum)
- 4. If anode voltage is 32kV or higher, replace C514 of 390PF/2kV with that of 680PF/2kV, and check if the voltage is within the standard range.
- 5. If anode voltage is 30kV or lower, replace C514 of 390PF/2kV with that of 100PF/2kV, and check if the voltage is within the standard range. **(Fig.4-2)**



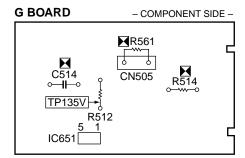


Fig. 4-2

4-2. HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT

When replacing the following components marked with \square on the schematic diagram always check hold-down voltage and if necessary re-adjust.

★: R514, R561
★: C507, C513
D501, D504, D507
IC301, IC501, IC651
R502, R514, R516, R517, R539, R560, R561
T502, T503, T504 (FBT)
D.Y

OPERATION CHECK

- 1. Remove CN651 connecter.
- 2. Short-circuit across TP-PROT (R692) and ground.
- 3. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
- 4. Connect a 220k variable resistor, across pin ③ and pin ⑤ of IC651 set to maximum value.
- 5. Power on the set.
- 6. Receive the dot signal. (PICTURE and BRIGHTNESS to minimum)
- 7. Gradually lower the value of the variable resistor and check that the hold-down circuit operates at a static voltmeter reading of 33.5±1.0kVdc when the raster disappears.

HV HOLD-DOWN ADJUSTMENT

- 1. Repart steps (1) ~ (7) as above.
- 2. If hold down voltage is 34.5kV or higher, remove R514, mount a resistor (390k Ω , 1/4W : RN) onto R561 instead, and check again if the hold-down voltage is within the standard range.
- 3. If hold down voltage is 32.5kV or lower, mount a resistor $(220k\Omega, 1/4W : RN)$ onto R561 and check again if the hold-down voltage is within the standard range. (Fig.4-2)

NOTE: Please finish the adjustment as soon as possible

4-3. +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC651.

- 1. Supply 230VAC to with variable autotransformer.
- 2. Input a dot signal.
- Set the PICTURE control and the BRIGHTNESS controls to minimum.
- 4. Confirm the voltage of G BOARD TP135V is less than 137.0Vdc.
- 5. If step 4 is not satisfied, replace IC651 and repeat above steps. (Fig.4-2)

4-4. +B OVP CONFIRMATION

- 1. Remove CN651 connector.
- 2. Connect a voltmeter to TP135V, and TP (PROT) and ground.
- 3. Connect a $220k\Omega$ variable resistor, across pin 3 and pin 5 of IC651 set to maximum value.
- 4. Supply 220VAC to variable autotransformer.
- $5. \ \ Set\ PICTURE\ and\ the\ BRIGHTNESS\ controls\ to\ minimum.$
- 6. Gradually turn the $220k\Omega$ variable resistor, and check if OVP works properly when the voltage of TP135V is between 139.0 ~ 151.5V. (Fig.4-2)

SECTION 5 CIRCUIT ADJUSTMENTS

5-1. RF AGC

- 1. Input a color-bar signal.
- 2. Adjust AGC VR of TU1101 so that snow noise, and crossmodulation disapper from the picture.
- 3. Verify picture quality on each channel.

5-2. BER DISPLAY ADJUSTMENT (DISP)

- 1. Receive the cross-hatch signal.
- 2. Set to Service mode.
- 3. Select "DISP", and adjust so that the blank spaces on the both sides of picture bar become equal.
- 4. Write the data into memory.

 $\boxed{\text{MUTING}} \rightarrow \boxed{\text{ENTER}}$

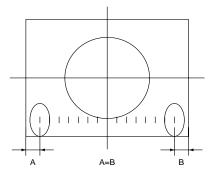


Fig. 5-1

5-3. SUB CONTRAST ADJUSTMENT (SCON)

- 1. Receive the color-bar signal.
- 2. PICTURE : maximum
- COLOR : minimum
 - BRIGHTNESS: minimum RON---1 GON---0 BON---0
- 3. Set to service mode.
- 4. Connect an oscilloscope between **(6)** pin of CN004 (A board) and ground.
- 5. Select "SCON", and adjust so that the wave from level is 1.65±0.05Vp-p.
- 6. Write the data into memory.

 $\boxed{\text{MUTING}} \rightarrow \boxed{\text{ENTER}}$

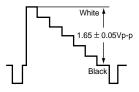


Fig. 5-2

5-4. SUB-HUE AND SUB-COLOR ADJUSTMENT (SHUE, SCOL)

- 1. Receive the color-bar signal.
- 2. PICTURE : maximum COLOR : minimum BRIGHTNESS : minimum
- 3. Set to service mode.
- 4. Connect an oscilloscope between ⑦ pin of CN004 (A Board) connecter and ground.
- Select "SHUE" and "SCOL", and adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
- 6. Raise SCOL data 1 steps higher.
- 7. Write the data into memory.

MUTING → ENTER

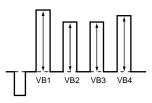
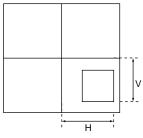


Fig. 5-3

5-5. P IN P POSITION ADJUSTMENT (PIPH, PIPV)

- 1. Receive the monoscope signal.
- 2. Set to P IN P () mode, and to Service mode.
- 3. Check the SUB PICTURE position.
- 4. Select "PIPH" and "PIPV" and adjust H/V position to the center level.
- 5. Write the data into memory.

MUTING → ENTER



H: 7.00 ± 0.25 sq V: 5.25 ± 0.25 sq

Fig. 5-4

5-6. P IN P SUB CONTRAST ADJUSTMENT (PCON)

- 1. Receive the color-bar signal.
- 2. PICTURE : maximum COLOR : minimum BRIGHTNESS : minimum
- 3. Set to service mode.
- 4. Connect an oscilloscope between **9** pin of CN303 (A Board) and ground.
- 5. Select " PCON " and adjust so that waveform level is 1.55 ± 0.1 Vp-p.
- 6. Write the data into memory.

 $\boxed{\text{MUTING}} \rightarrow \boxed{\text{ENTER}}$

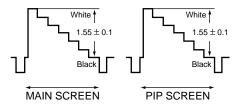


Fig. 5-5

5-7. P IN P SUB HUE, SUB COLOR ADJUSTMENT (IHUE, ICOL)

- 1. Receive the color-bar signal.
- 2. PICTURE : maximum COLOR : center BRIGHTNESS : center
- 3. Set to service mode.
- 4. Connect an oscilloscope between ⑤ pin of CN303 (A Board) and ground.
- 5. Select "IHUE" and "ICOL", adjust them to have VB1 = VB4 and VB2 = VB3 in the waveform levels.
- 6. Raise "ICOL" data 1 steps higher.
- 7. Write the data into memory.

MUTING → ENTER

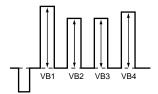
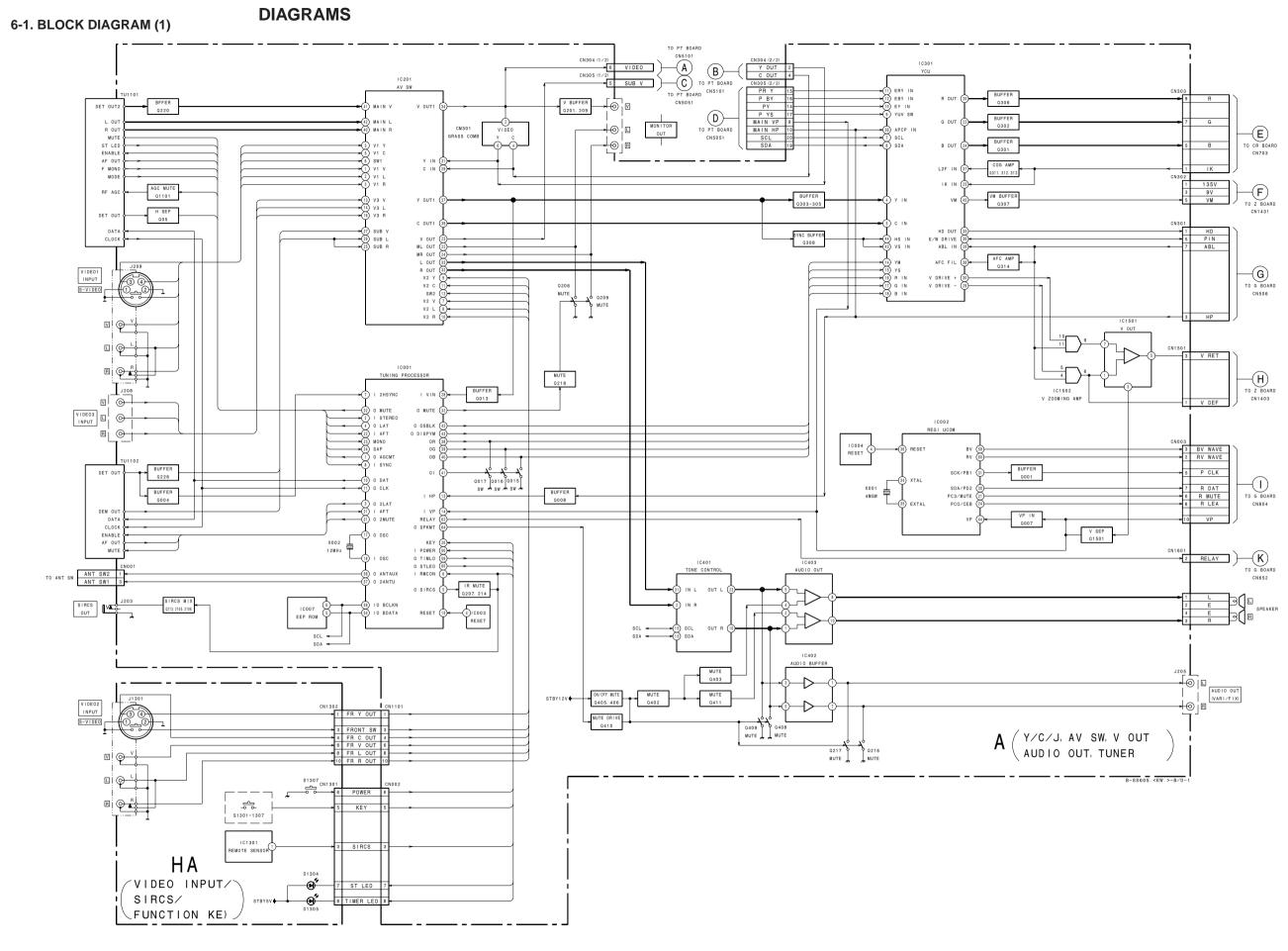


Fig. 5-6

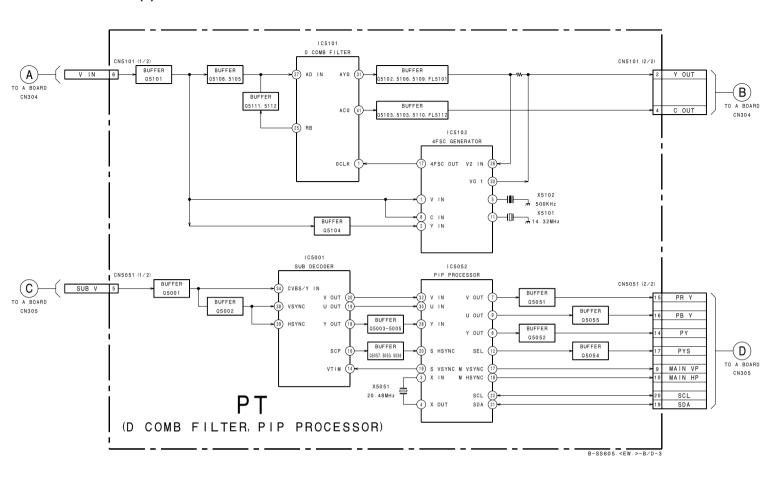
MEMO	

SECTION 6



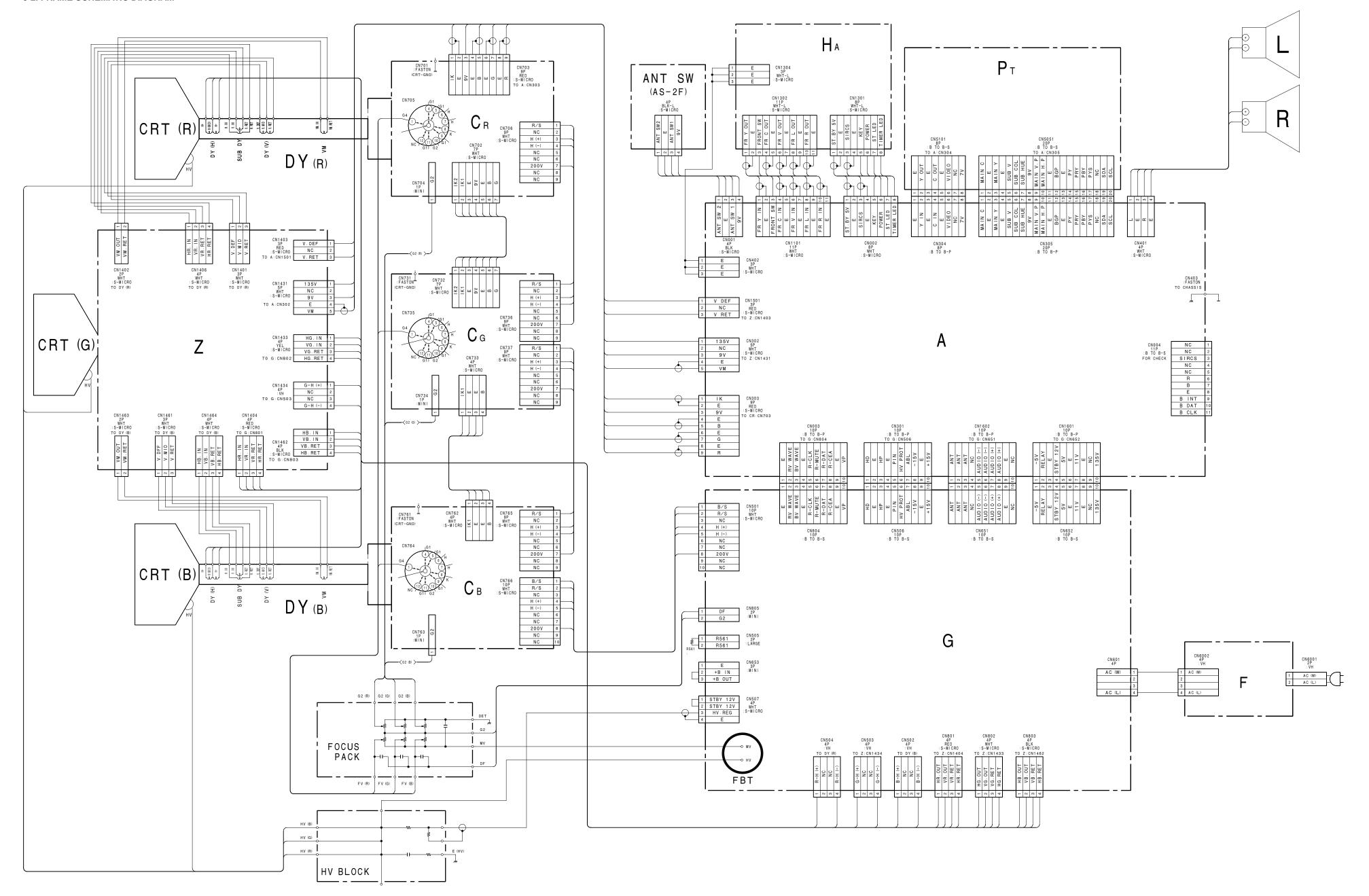
$CR_{(R\ OUT)}$ (DY/VM)DΥ CG (G OUT) T501 H DRIVE 0501 CB (B OUT) G (POWER SUPPLY

BLOCK DIAGRAM (3)

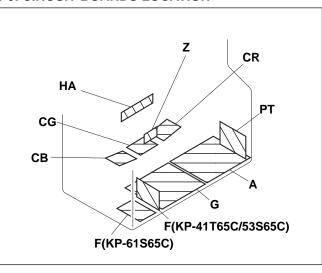


(AC LINE)

RGB CONV CORR



6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND

SCHEMATIC DIAGRAMS

- Capacitors without voltage indication are all 50V.
- All resistors are in ohms. $k\Omega$ =1000 Ω , $M\Omega$ =1000 $k\Omega$
- Indication of resistance, which dose not have one for rating electrical power, is
- Rating electrical power: 1/4W
- - : nonflammable resistor.
- two: fusible resistor.
- △ : internal component.
- panel designation and adjustment for repair.
 All variable and adjustable resistors have characteristic curve B, unless otherwise
- 1/7 : earth-chassis.
- The components identified by **I** in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding
- Should replacement be required, replace only with the value originally used.
- When replacing components identified by \square , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by \blacksquare and repeat the adjustment until the specified value is achieved. (Refer to R514,R561 and C514 adjustment on Page 44 – 45.)
- When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (🗷)	Adjustment (M)
C514, C515, C516, IC651, T502, T503, T504, DY	HV Reagurator (C514)
C507, C513, D501, D504, D507, IC301, IC501, IC651, R502, R514, R516, R517, R539, R560, R561, T502, T503, T504, DY	HV HOLD-DOWN (R514, R561)

- As to the voltage volue shown by the semiconductors on the Shematic Diagram,
- see the another list Readings are taken with a color-bar signal input.
- Readings are taken with a $10 M\Omega$ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V. *: Measurement impossibillity.
- Circled numbers are waveform references.
- _____ : B+ bus.

– 57 **–**

- ___ : B- bus.
- Signal path.(RF)

- Reference information
 RESISTOR : RN METAL FILM
 : RC SOLID
 - : FPRD NONFLAMMABLE CARBON
 : FUSE NONFLAMMABLE FUSIBLE
 : RW NONFLAMMABLE WIREWOUND
 : RS NONFLAMMABLE METAL OXIDE

 - : RB NONFLAMMABLE CEMENT
 - ADJUSTMENT RESISTOR
- :
 ADJUSTMENT RESIS
 COIL : LF-8L MICRO INDUCTOR
 CAPACITOR : TA TANTALUM

 - : PS STYROL : PP POLYPROPYLENE
 - : PT MYLAR
 - : MPS METALIZED POLYESTER
 : MPP METALIZED POLYPROPYLENE
 - : ALB BIPOLAR

 - : ALT HIGH TEMPERATURE : ALR HIGH RIPPLE

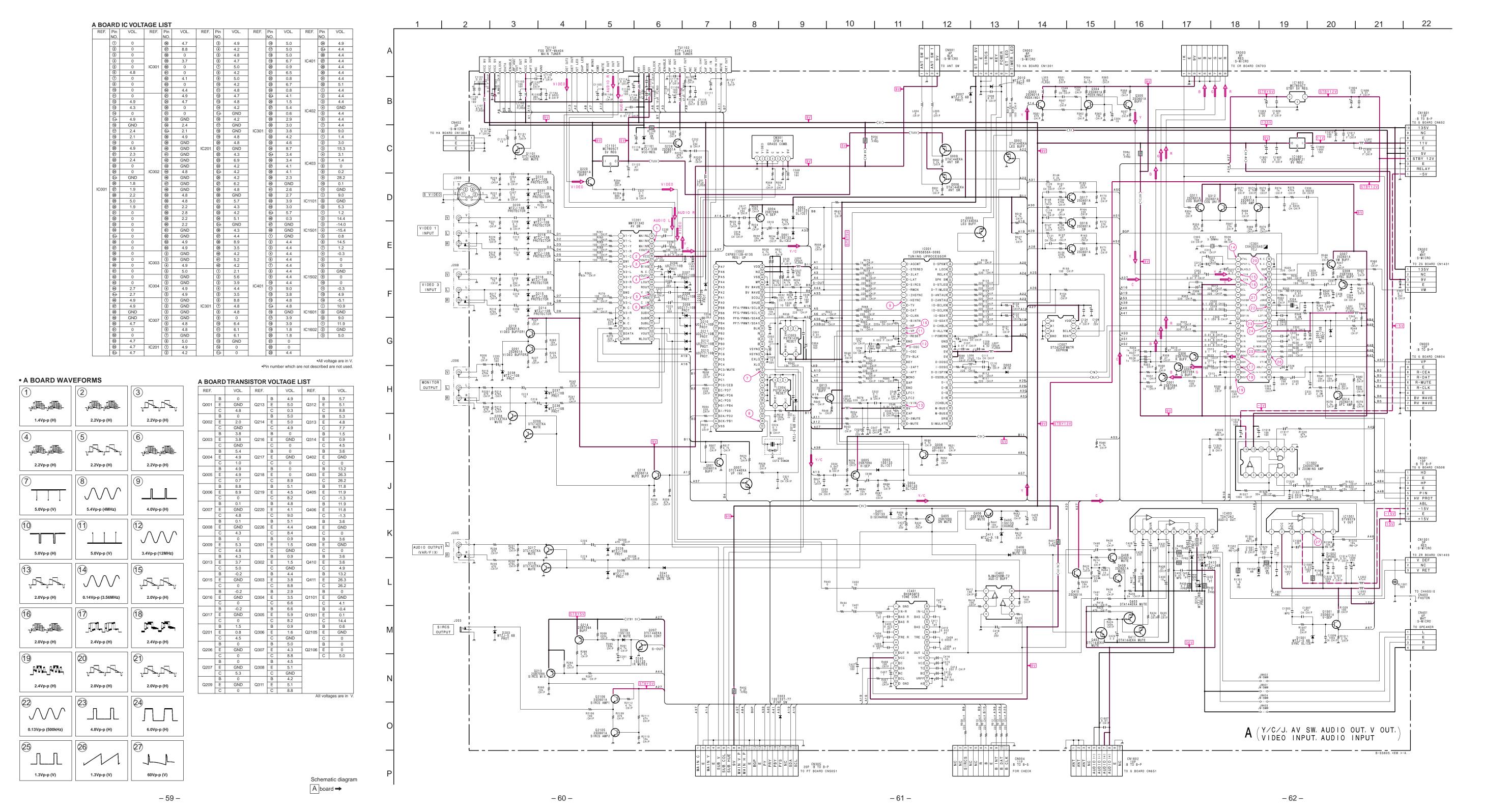
The components identified by shading and mark extstyle extstyleare critical for safety. Replace only with part number

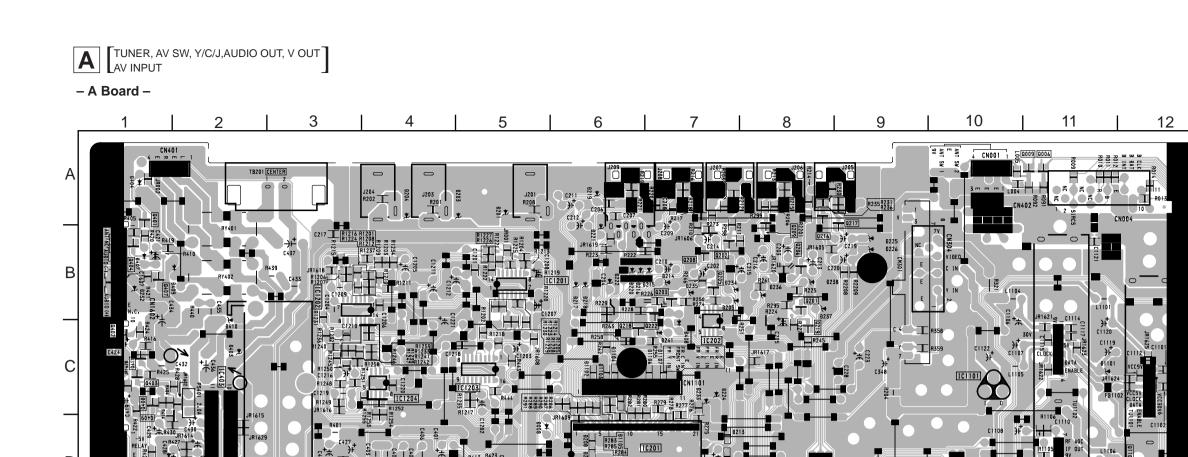
The symbol Indicate fast operating fuse. Replace only with fuse of same rating as maked.

Terminal name of semiconductors in silk screen printed circuit (*)

рπ	iileu cii	cuit (*)				
	Device	Printed symbol	Terminal name	Circuit		
1	Transistor	T	Collector Base Emitter			
2	Transistor		Collector Base Emitter			
3	Diode	A	Cathode Anode	<u> </u>		
4	Diode	Т	Cathode Anode (NC)	<u> </u>		
(5)	Diode	_	Cathode Anode (NC)	.		
6	Diode	T	Common Anode Cathode	φ.		
7	Diode		Common Anode Cathode	∫		
8	Diode	T	Common Anode Anode			
9	Diode	_	Common Anode Anode	┌▶┤┤		
10	Diode	Т	Common Cathode Cathode			
11)	Diode		Common Cathode Cathode			
12	Diode		Anode Anode Cathode Anode			
(13)	Transistor (FET)	I	Drain Source Gate			
14)	Transistor (FET)	H	Drain Source Gate	SO SO		
(15)	Transistor (FET)		□ Source □ Drain □ Gate	DO DO G		
-	Discrete semiconductot Ver.15 Ver.15					

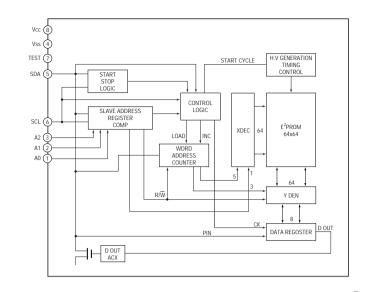
(Chip semiconductors that are not actually used are included.)

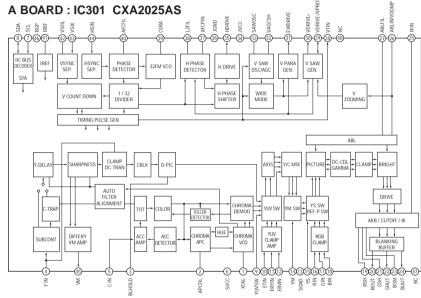


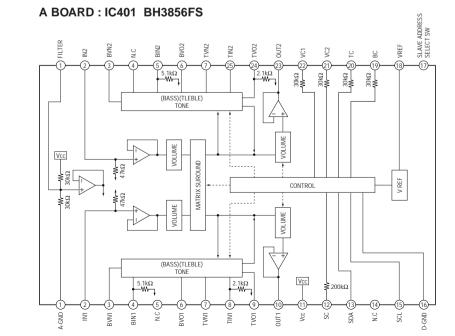


– 63 **–**

A BOARD : IC007 ST24C04FM6TR





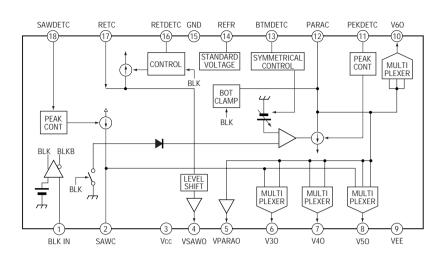


A BOAPD

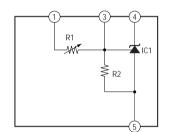
A BOA	ARD				
DIO	DE	*	Q006 Q007	A-11 H-5	(
D001	F-6	_	Q007	I-7	
D002	F-6	_	Q009	A-11	
D003	G-6	_	Q013	G-9	
D004	G-7	_	Q015	H-8	
D007	I-8	_	Q016	H-9	
D010	I-8	_	Q017	H-9	ì
D011	H-5	_	Q201	B-8	
D202	D-6	_	Q206	B-8	
D203	D-7	3	Q207	F-5	
D206	D-7	3	Q209	A-8	ì
D207	D-6	3	Q213	F-5	ì
D208	D-6	3	Q214	F-5	ì
D209	D-7	3	Q214	A-8	ì
D210	D-7	3	Q210 Q217	A-9	ì
D211	D-7	3	Q218	C-6	ì
D212	D-7	3	Q219	C-8	,
D213	D-7	3			,
D213	B-7	_	Q220	E-6	,
D215	B-7	_	Q226	D-7 ⊔₋11	,
D216	B-6	_	Q301 Q302	H-11	,
D210	B-6	_		H-12	
D217	B-6	_	Q303	G-11	(
D218 D219	A-6	_	Q304	G-11	(
D219 D220	A-6 B-6	_	Q305	G-11	(
D220 D221	В-6	_	Q306	G-12	(
		_	Q307	I-10	(
D222	B-6	-	Q308	I-10	(
D225	B-9	-	Q311	H-12	(
D226	B-9	-	Q312	H-12	(
D232	B-1	-	Q313	H-11	(
D236	B-8	-	Q314	I-11	(
D237	B-8	-	Q402	C-1	(
D238	B-8	-	Q403	C-1	(
D239	F-5	-	Q405	F-2	(
D240	F-5	-	Q406	F-2	(
D241	C-7	-	Q408	C-1	(
D305	I-11	-	Q409	D-1	(
D401	F-2	-	Q410	F-4	(
D403	C-2	-	Q1101	D-12	(
D405	F-2	-	Q1501	G-3	(
D406	F-3	-	Q2105	F-4	(
D408	C-7	-	Q2106	F-5	(
D410	C-2	-		ıc	
D411	F-2	-		IC	
D1101	C-11	-	IC001	G-8	
D1102	C-6	3	IC002	H-5	
D1103	C-6	3	IC003	F-8	
D1104	C-6	3	IC004	H-6	
D1105	C-6	3	IC007	H-8	
D1106	C-7	3	IC201	D-6	
D1107	C-7	3	IC301	H-11	
D1501	G-3	-	IC401	D-4	
D1502	G-3	_	IC402	D-5	
TRAN	ISISTOR	*	IC403	D-2	
Q001	G-1	1)	IC1101	C-10	
Q001	H-7	1	IC1501	G-3	
Q002 Q003	H-7	1	IC1502	I-4	
Q003 Q004	п-7 F-6	1	IC1601	F-2	
Q004 Q005	F-6	1	IC1602	F-3	
Q000	1 -0	\odot	I		

- 64 -

G BOARD: IC801, 802 PA0053B



G BOARD : IC651 DM-58



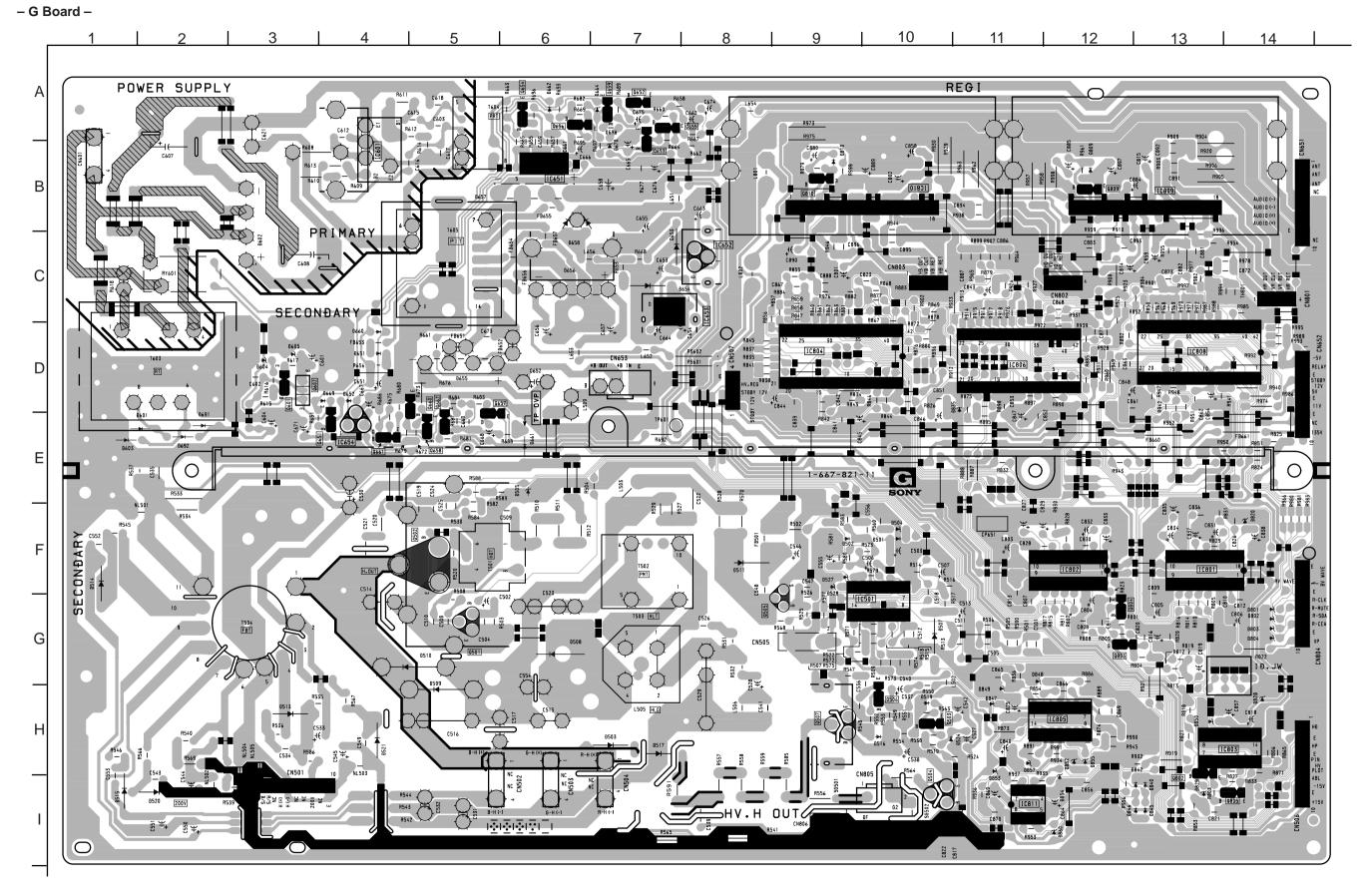
G BO	ARD				
DIC	DDE	*	D848	G-12	-
			D849	G-11	_
D501	F-10	-	D850	H-14	_
D502	F-9	-	D852	H-12	_
D503	H-7	-	D853	H-11	_
D504	F-10	-	D854	H-12	_
D507	G-10	-	D855	H-12	_
D508	G-6	-	D857	H-11	_
D509	G-5	-	D860	I-12	_
D510	G-4	-	TDAI	NSISTOR	*
D511	F-8	-			
D513	H-3	-	Q501	G-5	-
D514	F-1	-	Q502	F-5	_
D515	I-1	-	Q503	H-10	-
D517	H-7	-	Q504	I-11	-
D519	H-10	_	Q505	F-9	-
D520	I-2	_	Q506	H-10	-
D521	H-4	-	Q507	H-9	-
D524	H-11	_	Q601	D-3	_
D527	F-9	-	Q602	D-3	-
D528	F-9	_	Q651	D-4	_
D601	E-1	_	Q652	A-7	- - -
D602	B-3	-	Q653	A-7	_
D603	E-1	_	Q654	A-6	_
D604	D-3	_	Q655	A-7	_
D605	D-3	_	Q656	A-6	_
D651	D-4	_	Q657	D-5	_
D652	D-4	_	Q658	E-5	
D653	C-8	_	Q659	A-7	_
D654	C-7	_	Q660	D-5	_
D655	D-5	_	Q661	E-4	_
D656	C-6	_	Q662	D-5	_
D657	B-6	_	Q802	H-13	_
D658	B-6	_	Q803	G-13	_
D660	C-4	_	Q804	G-13	_
D661	E-6	_	Q805	I-14	_
D662	A-6	_	Q809	B-12	_
D664	A-7	_	Q810	B-9	_
D669	D-4	_	2010		_
D670	A-7	_		IC	
D691	E-2	_	IC501	F-10	
D692	E-2	_	IC601	A-4	
D801	G-14	_	IC651	B-6	
D802	G-14	_	IC652	C-8	
D803	G-14	_	IC653	C-7	
D803	G-14 G-14	_	IC654	E-4	
D809	B-12	_	IC801	F-14	
D809	B-12 B-9	_	IC802	F-12	
D810 D820	В-9 F-14	_	IC803	H-14	
		_	IC804	D-9	
D828	H-14	_	IC805	D-9 H-12	
D829	I-13	_	IC805	H-12 D-11	
D835	D-11	_			
D840	I-13	-	IC808	D-13	
Da : -	I-13	-	IC809	B-13	
D842	1.46				
D845	I-13	-	IC810	B-10	
	I-13 I-13 H-11	_	IC810 IC811	B-10 I-11	

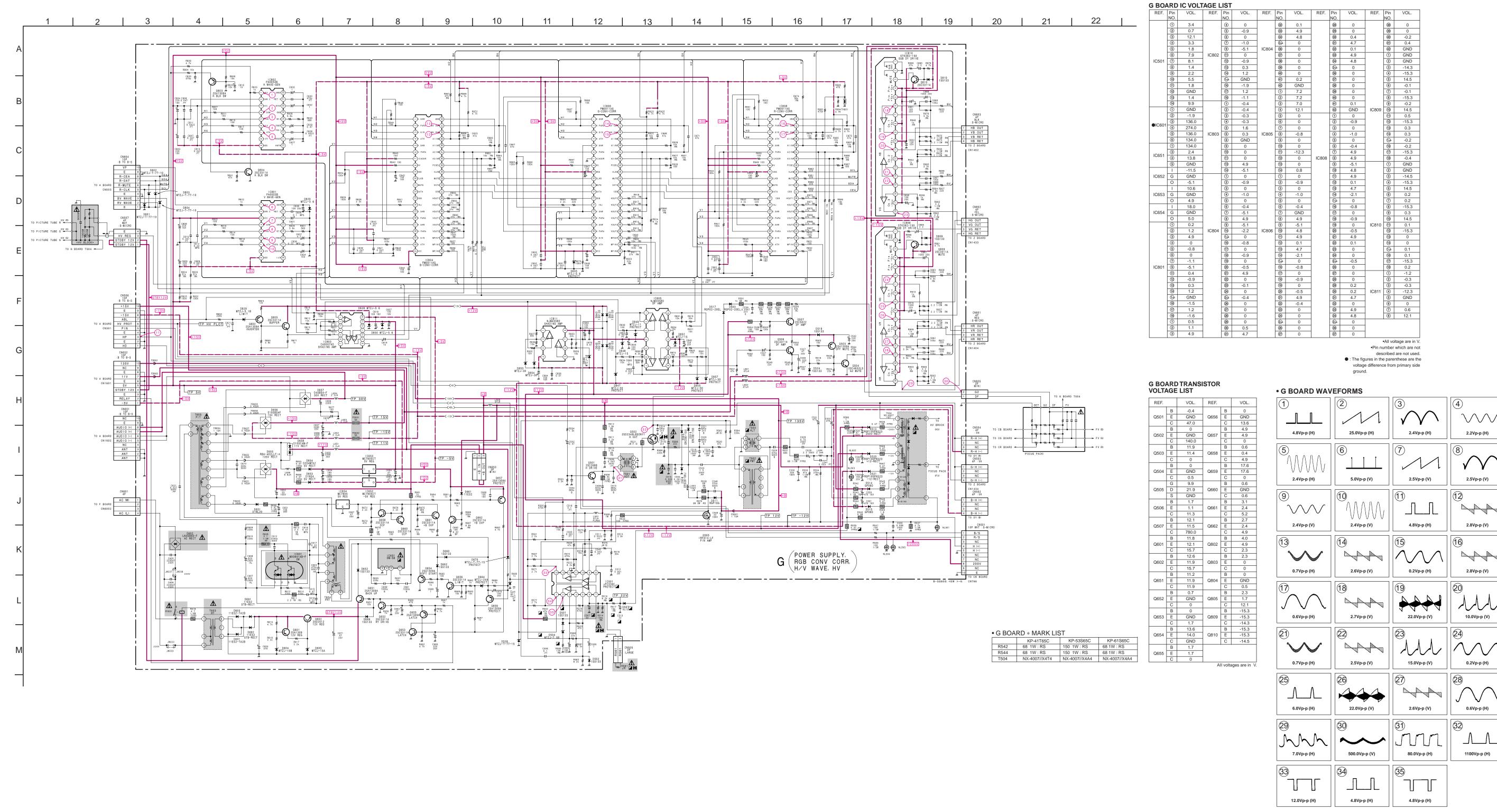


NOTE:

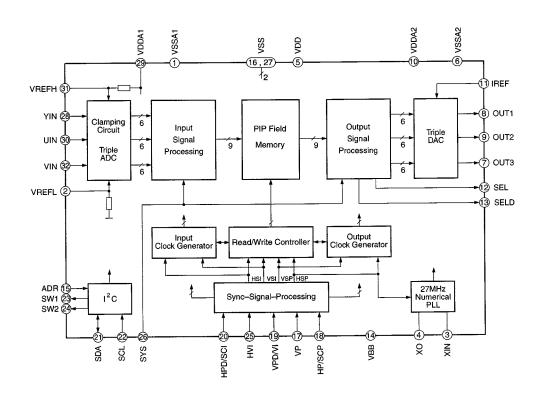
The circuit indicated as left contains hight voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

[POWER SUPPLY, HV, RGB CONV, H/V WAVE GNE]





PT BOARD : IC5052 SDA9288X-GEG



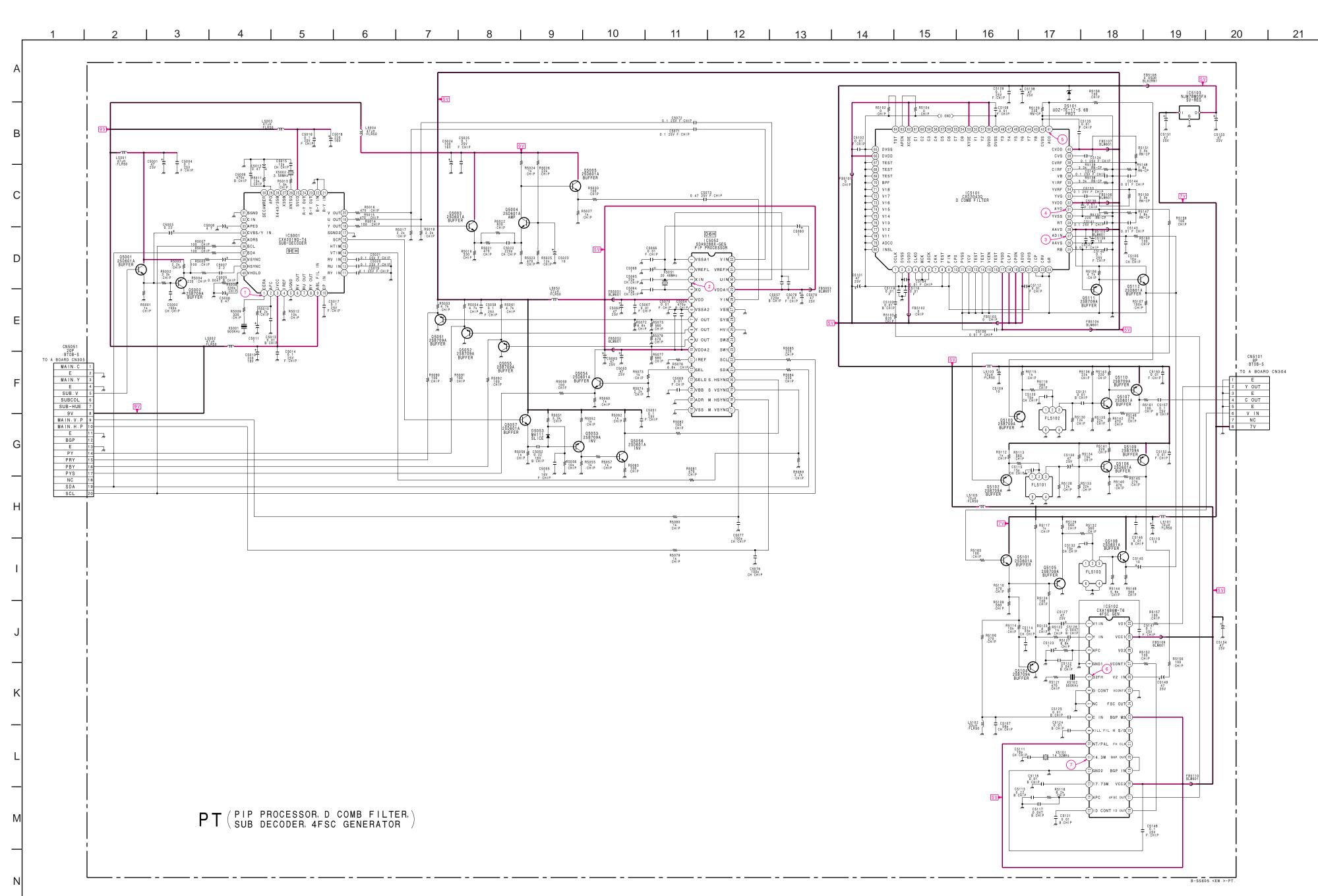
• PT BOARD	WAVEFORMS
------------	-----------

		3
0.12Vp-p (500kHz)	4Vp-p (20.48MHz)	1.8Vp-p (H)
4	5	6
1.8Vp-p (H)	1Vp-p (H)	0.1Vp-p (500kHz)

0.24Vp-p (14.32MHz)

REF.		1101			1.161				1			
.EF.	Pin NO.	VOL.	REF.	Pin NO.	VOL.	REF.		VOL.	REF.		VC	
	1	2.3		@	4.9		В	6.5		В	2.	
	2	4.1		21)	GND	Q5001	Е	5.8	Q5101	Е	1.	
	3	9.0		22	GND		С	8.8	1	С	5.	
	4	0		23	GND		В	5.8		В	0.	
	(5)	GND		24)	GND	Q5002	Е	6.5	Q5102	Е	1.	
	9	9.0		(a)	1.5		С	GND	1	С	GN	
	10	1.0		26	GND		В	2.8		В	0.	
	11)	3.8		27	1.5	Q5003	Е	2.2	Q5103	Е	1.	
	12	4.5		28	4.9		С	8.5	1	С	G١	
	13	4.6		29	2.6		В	2.9		В	0.	
	(14)	0.1		39	GND	Q5004	Е	2.2	Q5104	Е	1.	
	16	0.7		39	0.9		С	4.1		С	GN	
	17)	GND		32	4.9		В	4.1		В	1.	
	18	2.8			33	2.9	Q5005	Е	3.5	Q5105	Е	2.
5001	(19)	2.9		34)	1.8		С	8.5	1	С	GN	
3001	20	2.9		(3) ₀	1.8		В	0.4		В	2.	
	21)	GND		36	0.9	Q5051	Е	1.0	Q5106	Е	1.	
	22	GND		37	0.0		С	GND		С	4.	
	<u>@</u>	9.0		38	0		В	0		В	2.	
	26	2.4		39	0	Q5052	Е	0.5	Q5107	Е	1.	
	29	4.5		40	4.9	Q5053	С	GND		С	4.	
	(3)	GND		(41)	0.9		В	*	Q5108	В	2.	
	33	3.3	IC5101	(42)	GND		E	*		Е	1.	
	34)	3.6	100101	49	GND		С	*		С	5.	
	390	GND		60	4.9		В	0		В	4.	
	36	4.8		63	GND	Q5054	E	0	Q5109	Е	5.	
	37	4.8		62	4.9		С	4.9		С	2.	
	38	4.1		63	5.0		В	0.5		В	4.	
	39	3.3		64)	0	Q5055	Е	1.1	Q5110	Е	5.	
	40	0.7		69-	GND		С	GND		С	2.	
	1	GND		66	4.9		В	*		В	1.	
	2	2.9		67	GND	Q5056	Е	*	Q5111	Е	2.	
	3	2.4		68	GND		С	*		С	GN	
	4	2.2		69	GND		В	0		В	2.	
	(5)	4.9		70	GND	Q5057	Е	0	Q5112	Е	1.	
	6	GND		79	GND		С	4.9		С	4.	
- 1												
	7	0.4		72)	GND				AI	I volta	ges are	

PT BOARD TRANSISTOR



Schematic diagram ← G board

Schematic diagram PT board →

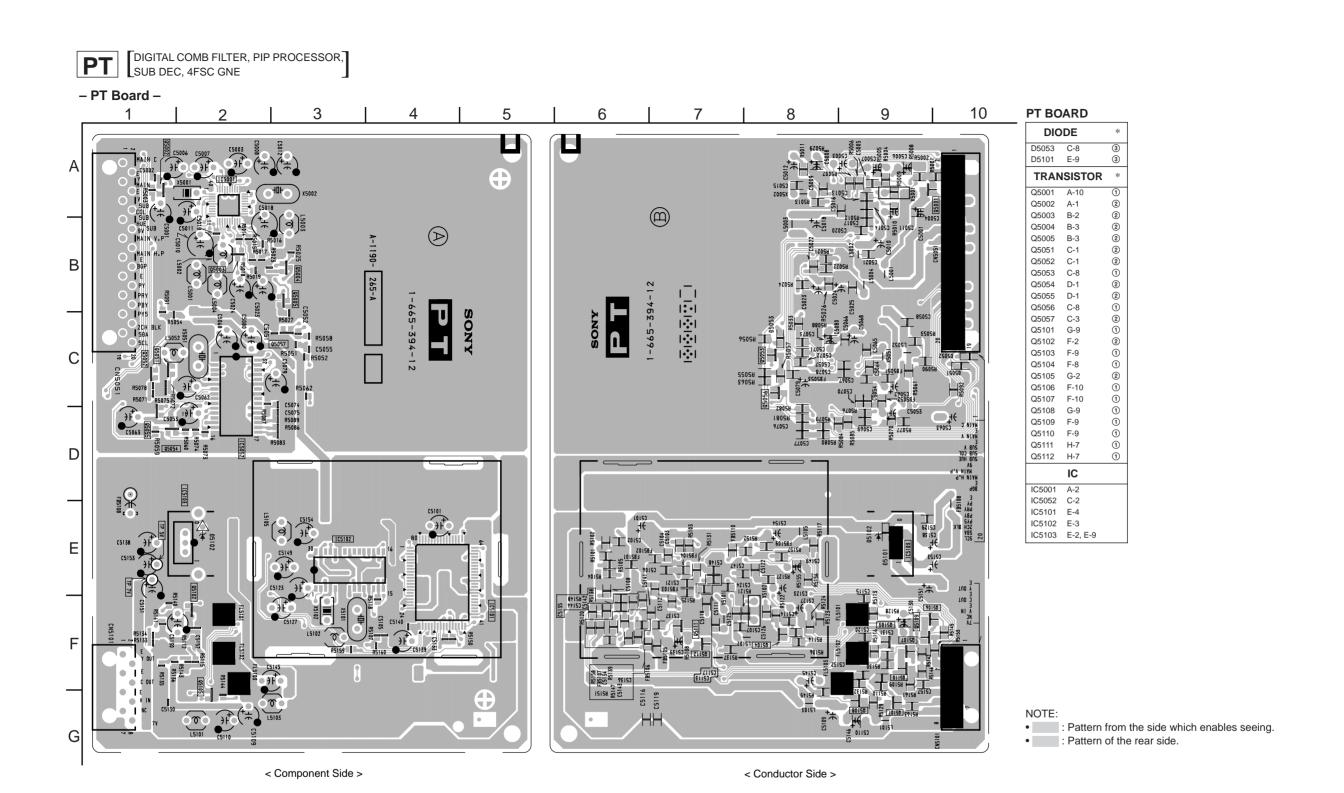
Pin numbers which are not described are not used.

− 73 **−**

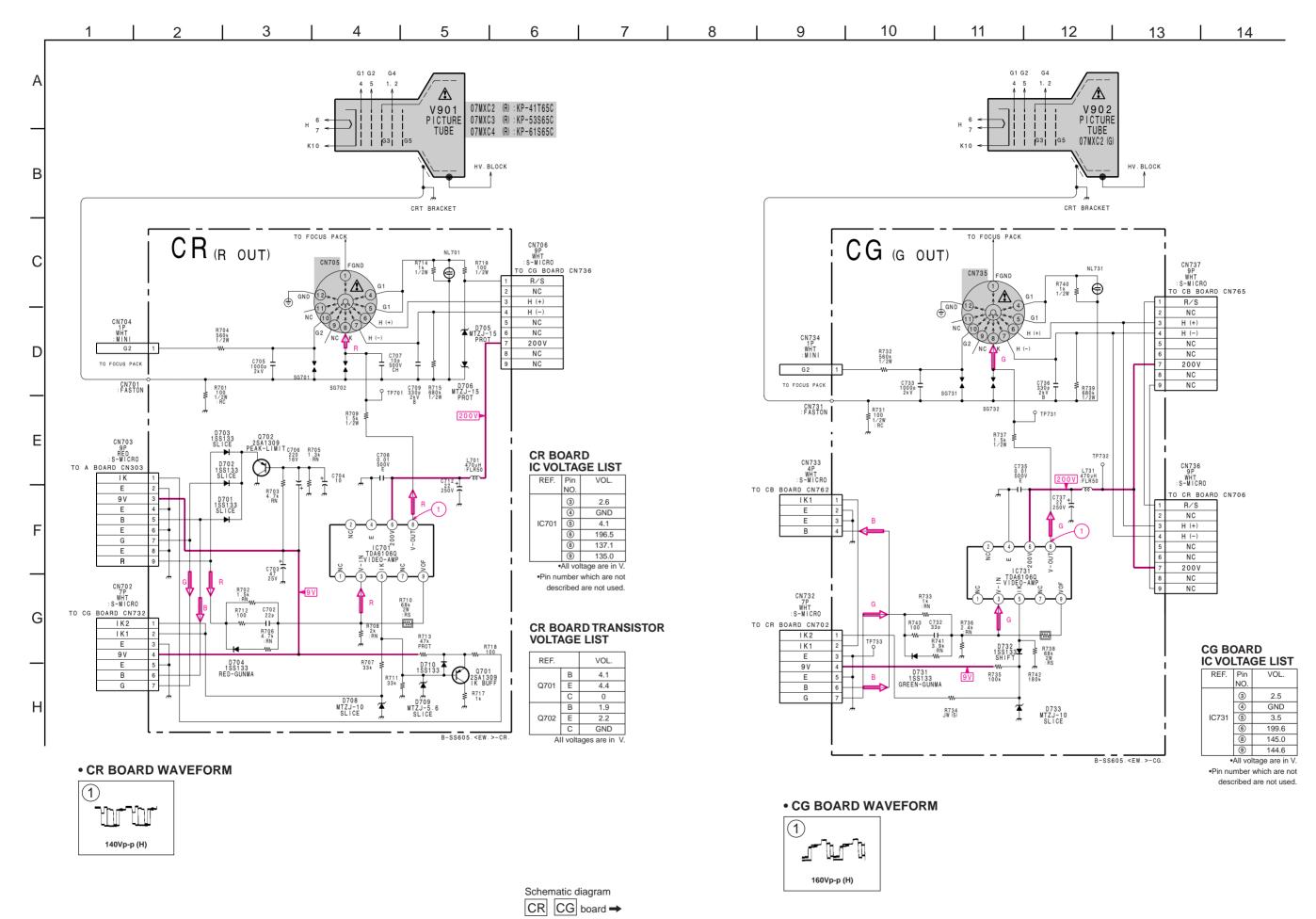
− 74 *−*

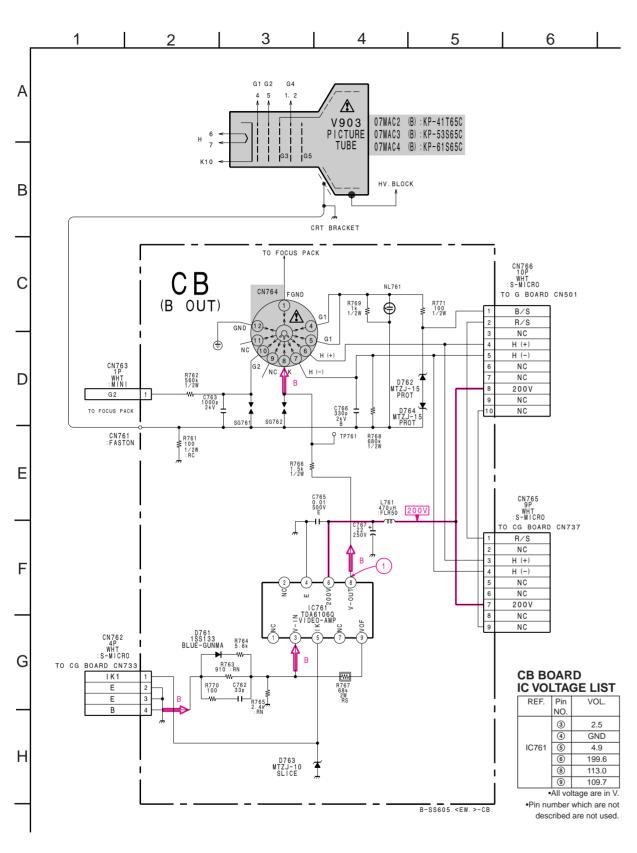
−75 −

− 76 −



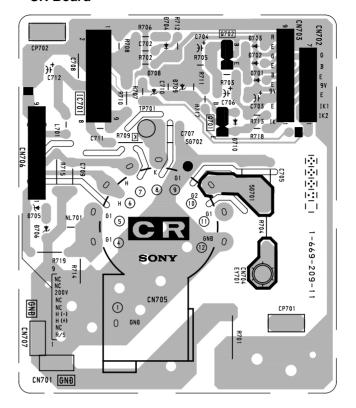
-77*-*



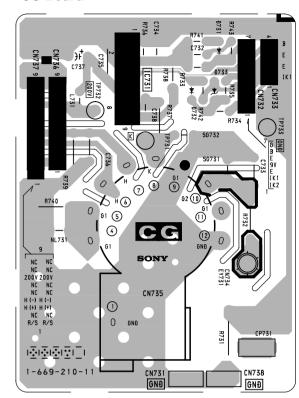




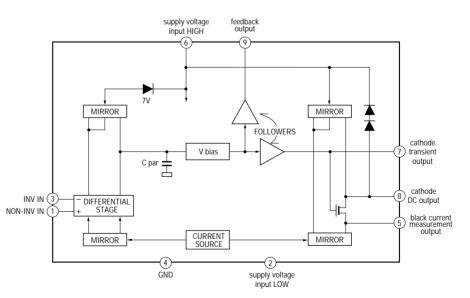
- CR Board -



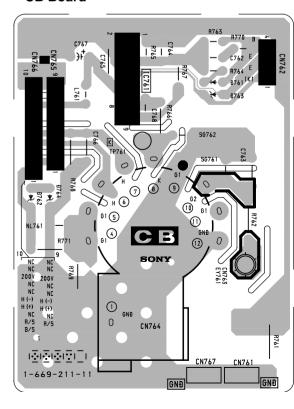
- CG Board -



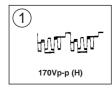
CR BOARD: IC701 TDA6106Q CG BOARD: IC701 TDA6106Q CB BOARD: IC701 TDA6106Q



- CB Board -



• CB BOARD WAVEFORM



4 5 6 8 9 10 11 12 13 Z BOARD TRANSISTOR VOLTAGE LIST 4P :VH TO G BOARD CN504 4P :VH TO G BOARD CN502 CN1434 4P : VH TO G BOARD CN503 DY (G) 0.9 R-H (+) B-H (+) Q1431 E 0.5 NC G-H (+) NC € H NID DY (H NC DY (H) NC DY (H) 67.2 R-H (-) NC B-H (-) 134.4 G-H (-) Q1432 E 138.4 CN1433 4P YEL :S-MICRO TO G BOARD CN802 67.2 SUB DY SUB DY SUB DY 5.7 Q1433 E 5.8 В 1 HG.IN GND VG.IN V.DEF V.NID e V. NID 3 VG.RET 5.7 DY (V DY (V) DY (V) HG. RET Q1434 E 5.8 9.0 R1431 560 CN1403 3P RED :S-MICRO 2.7 Q1435 E 2.1 TO A BOARD CN1501 \triangle <u>^</u> <u>^</u> 5.7 V. DEF 2.7 C Q1436 E 2.1 V. RET CN1401 3P WHT :S-MICRO С VW. RET 9.0 VM VM VM €_____ VM.RET €____ Wi.ret All voltages are in V. 1 V.DEF V.MID V. RET CN1461 3P WHT :S-MICRO D CN1402 2P WHT :S-MICRO DY1431 Q1432 2SA1837 VM. DRIVE1 DY1461 DY1461 201434 2SC3311A 81448 820 BUFF 820 R1464 FJW (5) W W W (5) 2SA1309A R1446 2SA1309A W (5) V.DFF 2 V. MID VM.OUT 3 V.RET VM.RET CN1431 5P WHT :S-MICRO TO A BOARD CN302 Q1436 2SC3311 BUFF 135V NC VM.IN 9 V E VM VM. RET C1441 R1453 0.001 47 VM ASSY CN1463 2P WHT :S-MICRO VM.OUT R1451 330 VM.RET CN1464 4P WHT :S-MICRO CN1406 4P WHT :S-MICRO HR. IN HB.IN R1465 VR. IN VB.IN VB.RET VR. RET G HR. RET HB. RET CN1404 4P RED :S-MICRO TO G BOARD CN801 CN1462 4P BLK :S-MICRO TO G BOARD CN803 HR. IN HB. IN VR.IN HR. RET HB. RET $Z_{\text{(DY/VM)}}$ • Z BOARD * MARK LIST

KP-41T65C KP-53S65C/61S65C

1-451-455-11

5MM

10MM

DY1431 1-451-454-11

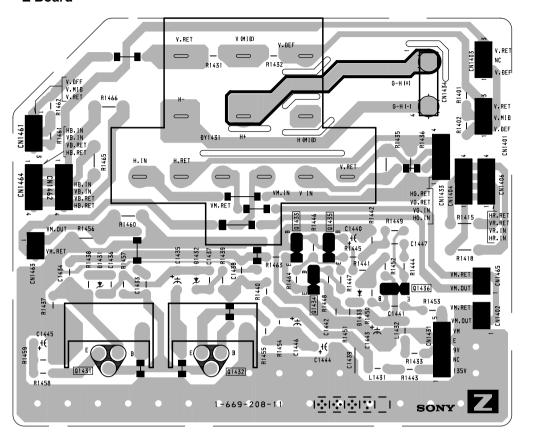
- 83 -

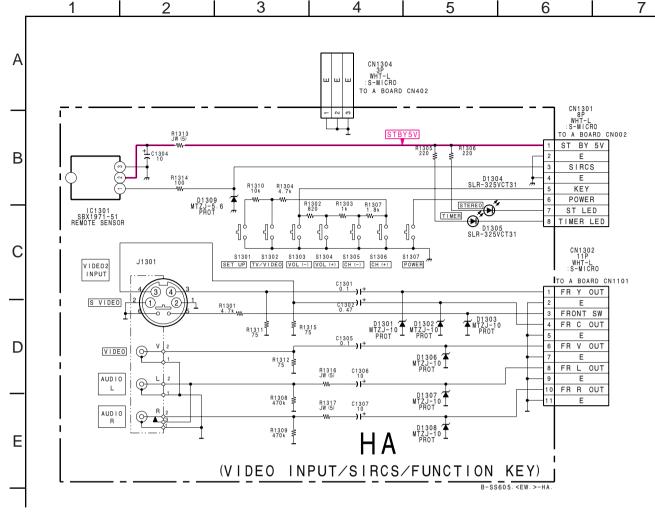
JW1432 5MM

JW1435 10MM



– Z Board –





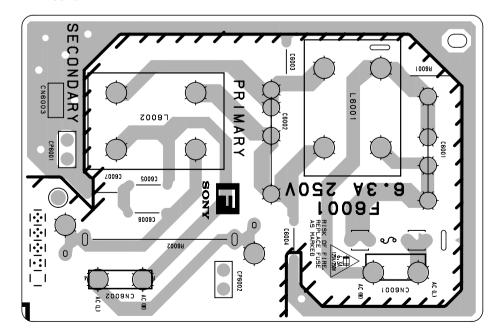
AC LINE) AC UI 1 2 C6001 CN6001 PROD1 RE001 RE001 RE001 RE002 0.47 0.

10 | 11 | 12 | 13

F [AC LINE]

8

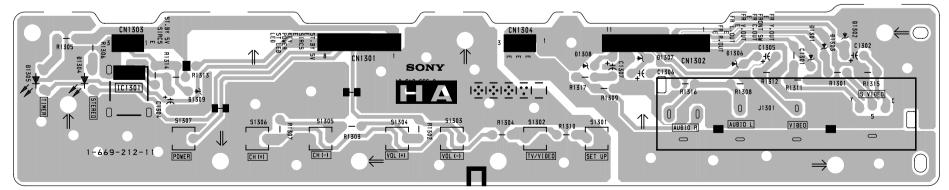
– F Board –



HA BOARD IC VOLTAGE LIST

REF.	Pin	VOL.					
	NO.						
	1	5.0					
IC1301	2	5.0					
	3	GND					
 All voltage are in V. 							

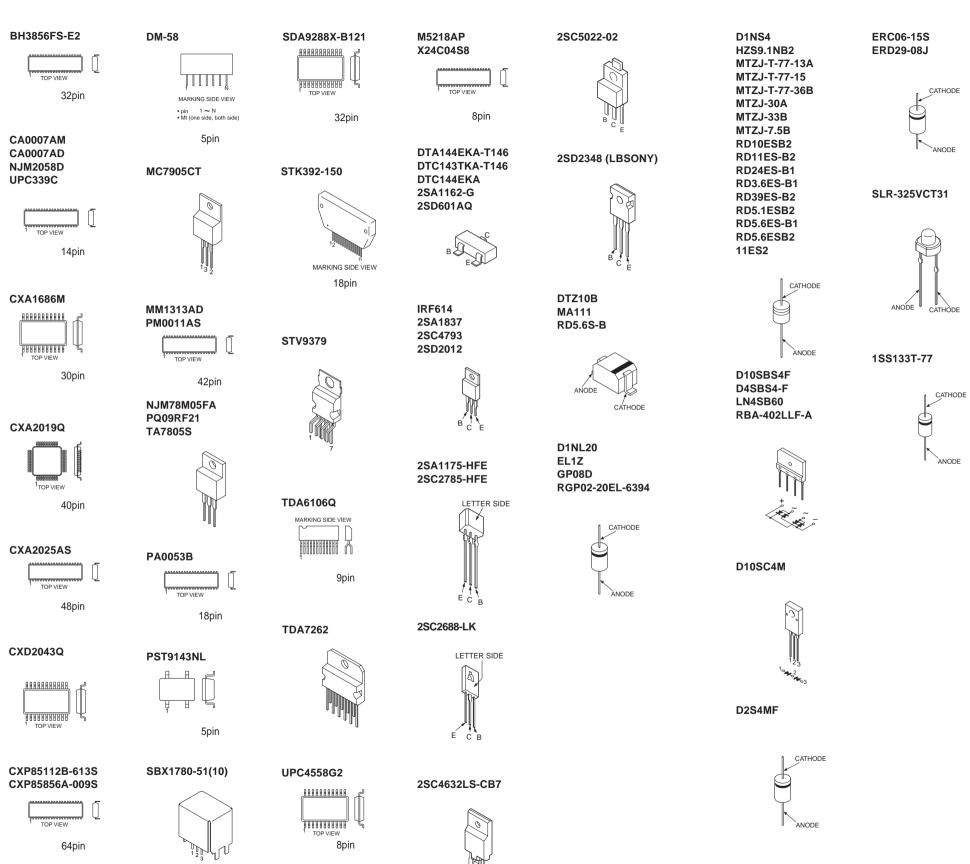




Schematic diagram

HAF board

6-5. SEMICONDUCTORS



- 88 **-**



SECTION 7

NOTE:

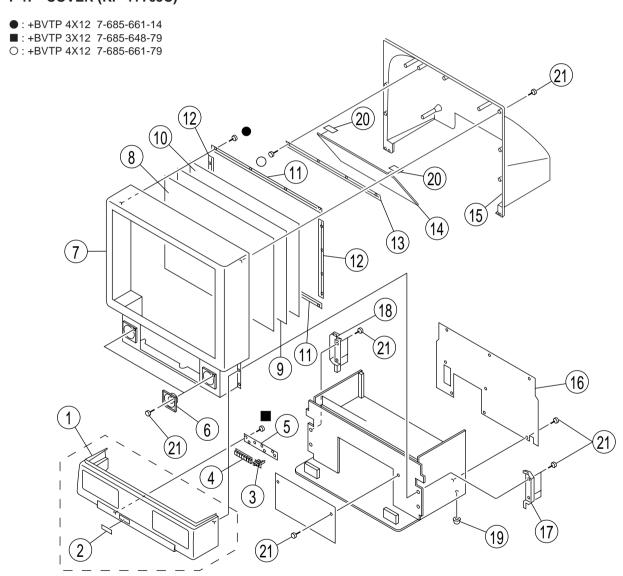
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- **EXPLODED VIEWS**
- The construction parts of an assembled part are indicated with a collation number in the remark column.

 The construction parts of an assembled part are indicated with a collation number in the remark column.

 The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The componants identified by shading and mark \triangle are critical for safety. Replace only with part number specified.

7-1. COVER (KP-41T65C)

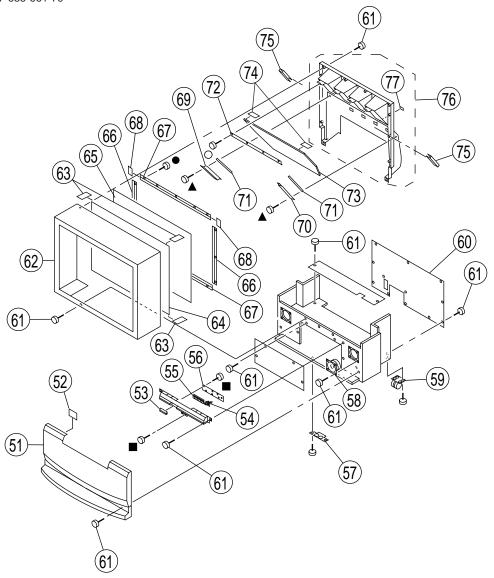


REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4034-531-1	CONTROL PANEL ASSY (PTG) (41	1) 2	12 *	4-059-011-01	HOLDER, SCREEN	
2	4-057-605-01	DOOR, CONTROL PANEL		13 *	4-037-351-01	HOLDER, MIRROR	
3	4-057-604-01	GUIDE, LED/IR		14	4-047-861-01	MIRROR (41), REFLECTION	
4	4-057-603-01	BUTTON, MULTI		15	X-4032-607-1	COVER, MIRROR	
5	* A-1372-474-A	HA BOARD, COMPLETE					
				16 *	4-059-014-01	BOARD (41), REAR	
6	1-505-748-11	SPEAKER (10CM)		17	4-057-601-01	CAP (RIGHT) (41), CONTROL PAN	IEL
7	X-4035-742-1	BEZNET ASSY (41)		18	4-057-600-01	CAP (LEFT) (41), CONTROL PANE	L
8	4-064-340-01	SCREEN (41), CONTRAST		19	4-057-611-01	FOOT	
9	4-064-338-01	PLATE (L), DIFFUSION		20	7-600-003-52	BLACK ACETATE (2142) 46x50M	
10	4-064-339-01	PLATE (F), DIFFUSION					
				21	4-378-522-31	SCREW (4X20), TAPPING	
11	* 4-059-007-01	HOLDER, SCREEN					

– 89 **–**

7-2. COVER (KP-53S65C)

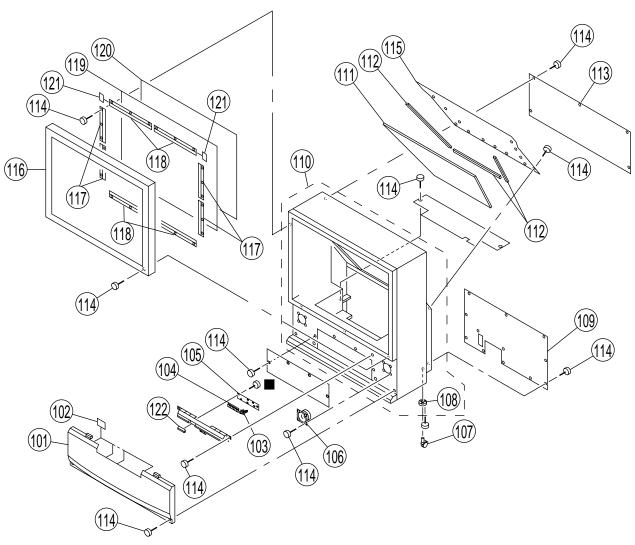
●:+BVTP 4X12 7-685-661-14 ■:+BVTP 3X12 7-685-648-79 ▲:+BVTP 4X16 7-685-663-71 ○:+BVTP 4X12 7-685-661-79



REF. NO.	PART NO.	DESCRIPTION	REMARK_	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4035-410-1	GRILLE ASSY, SPEAKER		66	* 4-048-152-11	HOLDER (S), SCREEN	
52	4-059-346-01	CUSHION, GRILLE		67	* 4-048-159-11	HOLDER (L), SCREEN	
53	4-057-605-01	DOOR, CONTROL PANEL		68	7-600-004-57	TAPE, SCREEN (12X50M) NTR	
54	4-057-604-01	GUIDE, LED/IR		69	* 4-051-790-02	HOLDER, MIRSD (L)	
55	4-057-603-11	BUTTON, MULTI		70	* 4-051-789-02	HOLDER, MIRSD (R)	
56 57 58	4-048-175-01	HA BOARD, COMPLETE FOOT, PLASTIC SPEAKER (10CM)				CUSHION HOLDER, MIRROR MIRROR (53), REFLECTION	
59		CASTER (DIA.30)		74		BLACK ACETATE (2142) 23X50M	
60	* 4-057-844-01	BOARD (53), REAR		75	4-033-775-41	PROTECTOR, MIRROR	
61 62 63 64 65	X-4035-743-1 7-632-661-51 4-063-555-01	SCREW (4X20), TAPPING BEZNET ASSY (53V) BLACK ACETATE (2142) 23X50M PLATE (L), DIFFUSION PLATE (F), DIFFUSION		76 77	* X-4032-620-1 4-048-150-01	COVER ASSY, MIRROR CAP, HOLE	77

7-3. COVER (KP-61S65C)

■:+BVTP 3X12 7-685-648-79



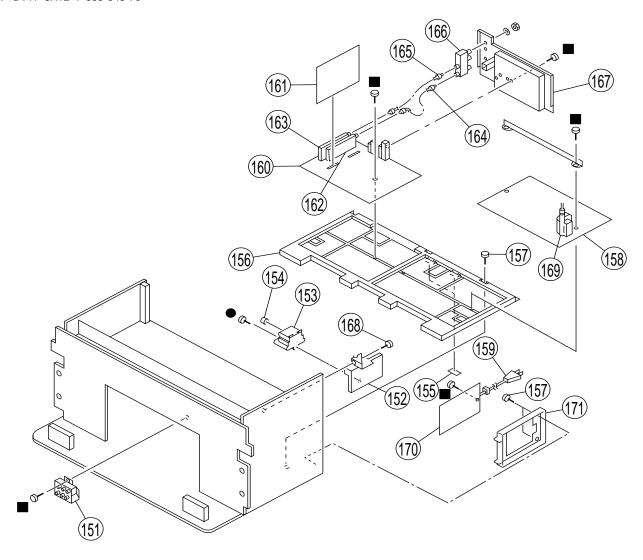
REF. NO	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
101 102 103	4-060-556-01	GRILLE ASSY, SPEAKER CUSHION GRILLE GUIDE, LED/IR		114	4-378-522-31	COVER, TOP REAR SCREW (4X20), TAPPING BOARD, MIRROR	
104	4-057-603-01	BUTTON, MULTI				-	
105	* A-1372-474-A	HA BOARD, COMPLETE		116 117		FRAME ASSY, SCREEN HOLDER (S), SCREEN	
106	1-505-378-11	SPEAKER (10CM)		118	4-040-120-01	HOLDER (L), SCREEN	
107	4-040-508-01	CASTER		119	4-063-551-01	PLATE (L), DIFFUSION	
108	4-030-850-01	SOCKET, CASTER		120	4-064-092-01	PLATE (F), DIFFUSION	
109	* 4-058-640-01	BOARD, REAR					
110	X-4035-418-1	CABINET ASSY	108	121	7-600-004-57	TAPE, SCREEN (12X50M) NTR	
				122	4-057-605-01	DOOR, CONTROL PANEL	
111	4-058-643-01	MIRROR, REFLECTION					
112	4-059-099-01	FORM, SPACER					

The componants identified by shading and mark △ are critical for safety.

Replace only with part number specified.

7-4. CHASSIS (KP-41T65C)

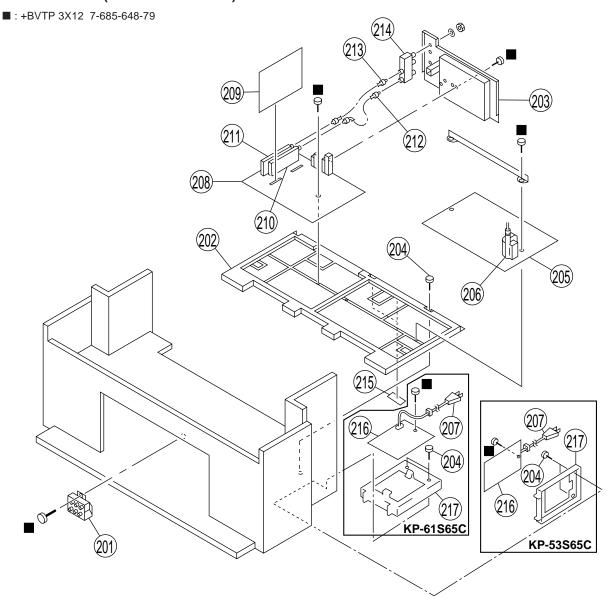
●:+BVTP 4X12 7-685-661-14 ■:+BVTP 3X12 7-685-648-79



REF. N	NO. PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
151	△ 1-223-925-12	RESISTOR ASSY (HIGH-VOLTAC	GE)	162	8-598-339-00	TUNER, FSS BTF-LA402	
152	* 4-057-596-01	BRACKET, HV		163	8-598-340-00	TUNER, FSS BTF-WA404	
153	₾ 8-598-955-30	BLOCK ASSY, HIGH-VOLTAGE		164	1-551-448-61	CABLE, P-P	
154	4-373-137-01	CAP (Z), RUBBER		165 *	1-557-056-41	CABLE, P-P	
155	3-551-305-21	CUSHION, PANEL					
				166	8-598-414-00	ANTENNA SWITCH AS-2F	7
156	* 4-057-594-01	BRACKET, MAIN		167	4-057-595-21	TERMINAL BOARD	
157	4-052-894-01	SCREW (4X20), HEAD TAPPING		168	4-378-522-31	SCREW (4X20), TAPPING	
158	* A-1316-392-A	G BOARD, COMPLETE		169 △	1-453-248-11	TRANSFORMER ASSY, FI	LYBACK
159	△ 1-769-796-11	CORD, POWER (WITH NOISE FII	LTER)				(NX-4007//X4T4)
160	* A-1298-448-A	A BOARD, COMPLETE		170 *	* A-1241-309-A	F BOARD, COMPLETE	
161	* A-1190-265-A	PT BOARD, COMPLETE		171 *	4-060-974-01	BRAKET, F	

The componants identified by shading and mark ≜ are critical for safety.
Replace only with part number specified.

7-5. CHASSIS (KP-53S65C/61S65C)



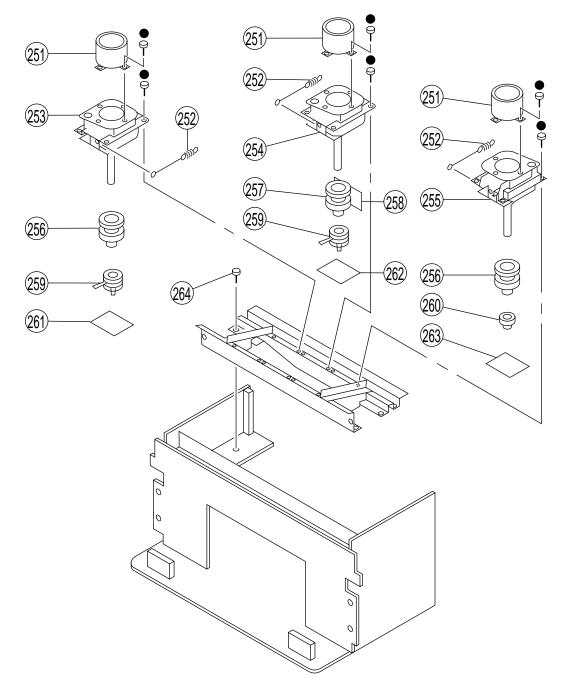
REF. N	IO. PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
201	△ 1-223-925-12	RESISTOR ASSY (HIGH-VOLTAGE	GE)	209 *	A-1190-265-A	PT BOARD, COMPLETE	
202	* 4-057-594-01	BRACKET, MAIN					
203	4-057-595-21	TERMINAL BOARD		210	8-598-339-00	TUNER, FSS BTF-LA402	
204	4-052-894-01	SCREW (4X20), HEAD TAPPING		211	8-598-340-00	TUNER, FSS BTF-WA404	
205	* A-1316-392-A	G BOARD, COMPLETE (KP-61S65	(C)	212 *	1-557-056-41	CABLE, P-P	
				213	1-551-448-61	CABLE, P-P	
	* A-1316-393-A	G BOARD, COMPLETE (KP-53S65	5C)	214	8-598-414-00	ANTENNA SWITCH AS-2F	
206	△ 1-453-238-11	TRANSFORMER ASSY, FLYBAC	K				
		(NX/40	007//X4A4)	215	3-551-305-21	CUSHION PANEL	
207	△ 1-769-796-11	CORD, POWER (WITH NOISE FI	LTER)	216 *	A-1241-309-A	F BOARD, COMPLETE	
208	* A-1298-448-A	A BOARD, COMPLETE		217 *	4-060-974-01	BRAKET, F	

The componants identified by shading and mark △ are critical for safety.

Replace only with part number specified.

7-6. PICTURE TUBE (KP-41T65C)

●:+BVTP 4X12 7-685-661-14

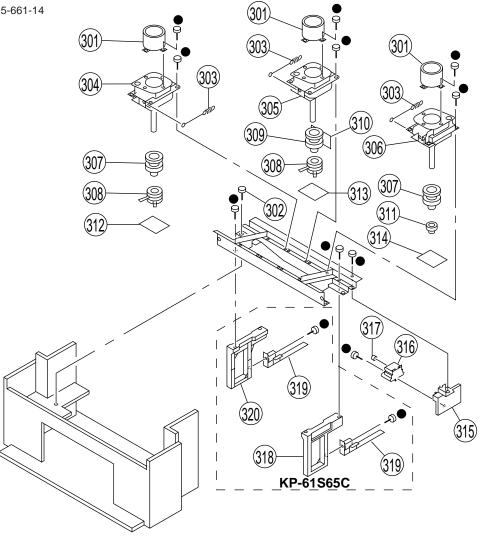


REF. N	NO. PART NO.	DESCRIPTION	REMARK	REF. N	O. PART NO.	DESCRIPTION	REMARK
251		LENS (DELTA 78)		258		Z BOARD, COMPLETE	
252 253	△ 8-733-539-05	SPRING, TENSION PICTURE TUBE 07MXC2 (R)		259 260	△ 1-452-790-21 1-452-909-31	MAGNET ASSY, 4 POLE	
254 255		PICTURE TUBE 07MXC2 (G) PICTURE TUBE 07MAC2 (B)		261	* A-1331-777-A	CR BOARD, COMPLETE	
		(GROUNI	SPRING)	262 263		CG BOARD, COMPLETE CB BOARD, COMPLETE	
256 257		DEFLECTION YOKE (R) (B) DEFLECTION YOKE (G)		264		SCREW (4X20), HEAD TAPPING	

The componants identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

7-7. PICTURE TUBE (KP-53S65C/61S65C)

●:+BVTP 4X12 7-685-661-14



301	4-040-131-21	LENS (LINNIT POINT 6) (KP-61S65C)	309
	4-056-258-01	LENS (DELTA 78) (KP-53S65C)	310
302	4-052-894-01	SCREW (4X20), HEAD TAPPING	311
303	4-048-142-01	SPRING, TENSION	312
304	△ 8-733-553-05	PICTURE TUBE 07MXC3 (R) (KP-53S65C)	313
			314
	△ 8-733-555-05	PICTURE TUBE 07MXC4 (R) (KP-61S65C)	
305	▲ 8-733-537-05	PICTURE TUBE 07MXC2 (G)	315
306	▲ 8-733-528-05	PICTURE TUBE 07MAC3 (B)	316
		(GROUND SPRING) (KP-53S65C)	317
	₾ 8-733-529-05	PICTURE TUBE 07MAC4 (B)	
		(GROUND SPRING) (KP-61S65C)	318
			319
307	△ 1-451-455-31	DEFLECTION YOKE (R) (B)	
308	△ 1-452-790-21	NECK ASSY	320

DESCRIPTION

REF. NO. PART NO.

REF. NO).	PART NO.	DESCRIPTION	REMARK
309	Æ	1-451-455-11	DEFLECTION YOKE (G)	
310	*	A-1390-843-A	Z BOARD, COMPLETE	
311		1-452-909-31	MAGNET ASSY, 4 POLE	
312	*	A-1331-777-A	CR BOARD, COMPLETE	
313	*	A-1331-778-A	CG BOARD, COMPLETE	
314	*	A-1331-779-A	CB BOARD, COMPLETE	
315	*	4-057-596-01	BRACKET, HV	
316	Æ	8-598-955-30	BROCK ASSY, HIGH-VOLTAGE	
317		4-373-137-01	CAP (Z), RUBBER	
318		4-057-613-01	BOARD (R), SIDE (KP-61S65C)	
319		4-058-638-01	STAY, CHASSIS (KP-61S65C)	
320		4-057-612-01	BOARD (L), SIDE (KP-61S65C)	

REMARK |

SECTION 8 ELECTRICAL PARTS LIST



NOTE:

The componants identified by shading and mark \triangle are critical for safety.

Replace only with part number specified.

- The components identified by

 in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- · All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1241-309-A	F BOARD, COMPI			C5005	1-163-017-00	CERAMIC CHIP	0.0047μF	10%	50V
					C5006	1-126-959-11	ELECT	0.47µF	20%	50V
					C5007	1-126-961-11	ELECT	2.2µF	20%	50V
		<capacitor></capacitor>			C5008	1-126-963-11	ELECT	4.7μF	20%	50V
					C5009	1-163-005-11	CERAMIC CHIP 4	70PF	10%	50V
C6001 △	1-104-708-11	FILM	0.47MF 20%	250V	C5010	1-126-934-11	ELECT	220μF	20%	16V
C6002 △	1-104-708-11	FILM	0.47MF 20%	250V						
C6004 △	1-113-900-11	CERAMIC	470PF 10%	250V	C5011	1-126-960-11	ELECT	1μF	20%	50V
C6005 △	1-113-907-51	CERAMIC	0.0022MF 20%	250V	C5012	1-126-959-11	ELECT	$0.47\mu F$	20%	50V
	1-113-907-51		0.0022MF 20%	250V	C5013		CERAMIC CHIP	$0.01\mu F$	10%	50V
C6007 △	1-113-907-51	CERAMIC	0.0022MF 20%	250V	C5014		CERAMIC CHIP	$0.1\mu F$		25V
					C5015	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
		<connector></connector>			C5016	1-163-038-91	CERAMIC CHIP	0.1µF		25V
					C5017	1-163-038-91	CERAMIC CHIP	0.1µF		25V
CN6001*	1-580-843-11	PIN, CONNECTO	R (POWER)		C5018	1-126-934-11	ELECT	220μF	20%	16V
CN6002*	1-580-689-11	PIN, CONNECTO	R (PC BOARD)	4P	C5019	1-163-038-91	CERAMIC CHIP	0.1µF		25V
CN6003 A	1-695-915-11	TAB (CONTACT)			C5020	1-163-038-91	CERAMIC CHIP	0.1μF		25V
					C5021	1-163-038-91	CERAMIC CHIP	0.1µF		25V
		<fuse></fuse>			C5022		CERAMIC CHIP	220PF	5%	50V
					C5023	1-126-964-11		10μF	20%	50V
F6001 △	1-532-506-51	FUSE 6.3A/250V			C5024	1-126-933-11		100μF	20%	16V
		CLIP, FUSE; F600	1		C5025	1-163-038-91	CERAMIC CHIP	0.1μF		25V
					C5051	1-163-038-91	CERAMIC CHIP	0.1μF		25V
		<coil></coil>			C5052	1-164-489-11	CERAMIC CHIP	0.22µF	10%	16V
					C5053	1-104-664-11	ELECT	47μF	20%	25V
L6001 🛆	1-424-248-11	TRANSFORMER,	LINE FILTER		C5054	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
L6002 🛆	1-424-248-11	TRANSFORMER,	LINE FILTER		C5055	1-164-346-11	CERAMIC CHIP	1μF		16V
					C5057	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
		<resistor></resistor>			C5058	1-163-038-11	CERAMIC CHIP	$0.1 \mu F$		25V
					C5062	1-104-664-11		47μF	20%	25V
	1-218-265-11		8.2M 5% 1W		C5063	1-104-664-11		47μF	20%	25V
R6002 △	1-202-981-11	CEMENTED	0.82 5% 20W		C5064	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
					C5065	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
					C5066		CERAMIC CHIP	0.01µF		50V
******	******	******	******	*****	C5067	1-163-031-11	CERAMIC CHIP	0.01µF		50V
					C5068	1-126-960-11	ELECT	1μF	20%	50V
*	A-1190-265-A	PT BOARD, COMI			C5069	1-163-031-11	CERAMIC CHIP	0.01μF		50V
					C5070	1-163-031-11	CERAMIC CHIP	0.01µF		50V
					C5070		CERAMIC CHIP	0.01μΓ 0.1μF		25V
		<capacitor></capacitor>			C5072		CERAMIC CHIP	0.1μF		25V
					C5072		CERAMIC CHIP	0.47μF		25V 25V
C5001	1-104-664-11	ELECT	47μF 20%	25V	C5076		CERAMIC CHIP	100PF	5%	50V
C5002		CERAMIC CHIP	100PF 5%	50V						
C5003	1-126-957-11		0.22μF 20%	50V	C5077	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5004		CERAMIC CHIP	0.1μF	25V	C5078		CERAMIC CHIP	0.01µF		50V
			•							

KP-41T65C/53S65C/61S65C RM-Y136A RM-Y136A RM-Y136A



	REF. NO.	PART NO.	DESCRIPTION			REMARK	REE NO	PART NO.	DESCRIPTION		REMARK
	KEP. NO.						KEP. NO.	TAKT NO.	DESCRII HON		KEWAKK
				•					<connector></connector>		
Color 1-16-23-11 CERAMIC CHIP 001µF 050V 0500 1-16-30-11 CERAMIC CHIP 001µF 050V 0500 1-12-30-9-11 ELECT 00µF 20% 50V 0500 1-12-30-9-11 EREAMIC CHIP 00µF 0500 05							CN5051	1-573-301-21	CONNECTOR, BO	ARD TO BOARD	20P
CS104	C5102	1 162 021 11	CED AMIC CHID	0.01E		501/	CN5101	1-770-156-21	CONNECTOR, BO	ARD TO BOARD	8P
				•	10%						
	C5104			0.01µF					<diode></diode>		
CS107					0.5PF		D5053	8-719-404-49	DIODE MA111		
CS108	C5100	1 100 001 11	CLIC IIVIIC CIIII	0.01μ1		50 1					
CS100					5%						
CS112				•	20%				<ferrite bead=""></ferrite>	>	
CS112							ED 5051	1 414 105 11	EEDDITE	0.44	
CS112	C5111	1-163-099-00	CERAMIC CHIP	18PF	5%	50 V				•	
CS116		1-163-031-11	CERAMIC CHIP	$0.01 \mu F$							
CS116				•							
CS10							FB5102	1-216-295-91	CONDUCTOR, CH	IIP	
CS118					570		FB5103	1-216-295-91	CONDUCTOR, CH	IIP	
CS118											
C5120											
CS120				•	1070					•	
C5122	C5120	1-163-231-11	CERAMIC CHIP	15PF		50V				·	
C5122	C5121	1-164-232-11	CERAMIC CHIP	0.01μF	10%	50V					
C5124	C5122	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V					
C5125	C5123	1-126-960-11	ELECT	1μF	20%	50V				•	
C5126				•					ZEH TEDS		
C5127 1-104-664-11 ELECT				•					\riliek>		
C5129				•							
C5130				•	20%						
C5131				•	20%		1123103	1-239-047-11	TILIER, LOW TAS		
C5133	C5131	1-164-232-11	CERAMIC CHIP	0.01μF							
C5134	C5132	1-163-231-11	CERAMIC CHIP	15PF	5%	50V			<ic></ic>		
C5135	C5133	1-163-038-91	CERAMIC CHIP	0.1µF		25V	IC5001	8-752-078-83	IC CXA2019Q		
C5136				•						1	
C5137				•							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				•							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	G5120	1 104 664 11	FLECT	47E	200/	251					
C5140				•					<coil></coil>		
C5142 1-163-038-91 CERAMIC CHIP 0.1μF 25V L5002 1-410-478-11 INDUCTOR 47μH L5003 1-410-478-11 INDUCTOR 47μH L5003 1-410-478-11 INDUCTOR 47μH L5003 1-410-478-11 INDUCTOR 47μH L5004 1-410-478-11 INDUCTOR 47μH L5014 1-163-031-11 CERAMIC CHIP 0.01μF 50V L5052 1-408-607-31 INDUCTOR 22μH L5024 1-164-232-11 CERAMIC CHIP 0.01μF 20% 50V L5052 1-408-607-31 INDUCTOR 22μH L5103 1-410-470-11 INDUCTOR 10μH L5147 1-163-038-91 CERAMIC CHIP 0.1μF 25V L5102 1-410-470-11 INDUCTOR 10μH L5103 1-410-470-11 INDUCTOR 10μH L5103 1-410-470-11 INDUCTOR 10μH L5104 1-163-038-91 CERAMIC CHIP 0.01μF 25V L5105 1-410-470-11 INDUCTOR 10μH L5104 1-104-664-11 ELECT 47μF 20% 25V C5151 1-104-664-11 ELECT 47μF 20% 25V C5152 1-163-031-11 CERAMIC CHIP 0.01μF 50V C5153 1-104-664-11 ELECT 47μF 20% 25V C5154 1-104-664-11 ELECT 47μF 20% 25V C5155 1-104-664-11 ELECT 47μF 20% 25V C5154 1-104-664-11 ELECT 47μF 20% 25V C5155 C5154 1-104-664-11 ELECT 47μF 20% 25V C5155 C5154 1-104-664-11 ELECT 47μF 20% 25V C5156 C5156 1-164-004-11 ELECT 47μF 20% 25V C5002 8-729-216-22 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V C5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V C5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V C5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V C5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 CERAMIC CHIP 0.1μF 10% 25V C5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 C5154 C515	C5140			0.1μF		25V					
L5003				•							
C5143 1-163-031-11 CERAMIC CHIP 0.01μF 50V L5004 1-410-478-11 INDUCTOR 47μH C5144 1-163-031-11 CERAMIC CHIP 0.01μF 50V L5052 1-408-607-31 INDUCTOR 22μH C5145 1-126-964-11 ELECT 10μF 20% 50V C5146 1-164-232-11 CERAMIC CHIP 0.01μF 10% 50V L5101 1-410-470-11 INDUCTOR 10μH C5147 1-163-038-91 CERAMIC CHIP 0.1μF 25V L5102 1-410-476-11 INDUCTOR 33μH L5103 1-410-470-11 INDUCTOR 10μH L5105 10μH	C5142	1-103-038-91	CERAMIC CHIP	0.1μF		25 V					
C5145 1-126-964-11 ELECT 10μF 20% 50V C5146 1-164-232-11 CERAMIC CHIP 0.01μF 10% 50V L5101 1-410-470-11 INDUCTOR 10μH L5103 1-410-470-11 INDUCTOR 33μH L5103 1-410-470-11 INDUCTOR 10μH L5103 10μH L5103 1-410-470-11 INDUCTOR 10μH L5103 10μH L5103 1-410-470-11 INDUCTOR 10μH L5103 10	C5143	1-163-031-11	CERAMIC CHIP	$0.01 \mu F$		50V					
C5146 1-164-232-11 CERAMIC CHIP 0.01μF 10% 50V L5101 1-410-470-11 INDUCTOR 10μH C5147 1-163-038-91 CERAMIC CHIP 0.1μF 25V L5102 1-410-476-11 INDUCTOR 33μH L5103 1-410-470-11 INDUCTOR 10μH L5103 1-410-470-11 INDUCTOR 10μH L5103 1-410-470-11 INDUCTOR 10μH L5104 1-104-664-11 ELECT 47μF 20% 25V C5150 1-163-031-11 CERAMIC CHIP 0.01μF 50V C5151 1-104-664-11 ELECT 47μF 20% 25V C5152 1-163-031-11 CERAMIC CHIP 0.01μF 50V C5153 1-104-664-11 ELECT 47μF 20% 25V C5001 8-729-422-27 TRANSISTOR 2SD601A-Q C5154 1-104-664-11 ELECT 47μF 20% 25V Q5002 8-729-216-22 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 TRANSISTOR 2SD601A-Q C5001 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 TRANSISTOR 2SD601A-Q C5157 CERAMIC CHIP 0.1μF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 CERAMIC CHIP 0.1μF 10% 25V C5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 CERAMIC CHIP 0.1μF 10% 25V C5004 8-729-422-27 C5004 C				•	2001		L5052	1-408-607-31	INDUCTOR	22μΗ	
C5147 1-163-038-91 CERAMIC CHIP 0.1μF 25V L5102 1-410-476-11 INDUCTOR 33μH L5103 1-410-470-11 INDUCTOR 10μH L5104 1-410-470-11 INDUCTOR 10μH L5105 10μH L510				•			L5101	1-410-470-11	INDLICTOR	10uH	
C5148 1-163-038-91 CERAMIC CHIP 0.1μF 25V L5105 1-410-470-11 INDUCTOR 10μH C5149 1-104-664-11 ELECT 47μF 20% 25V C5150 1-163-031-11 CERAMIC CHIP 0.01μF 50V C5151 1-104-664-11 ELECT 47μF 20% 25V C5152 1-163-031-11 CERAMIC CHIP 0.01μF 50V C5153 1-104-664-11 ELECT 47μF 20% 25V C5153 1-104-664-11 ELECT 47μF 20% 25V Q5001 8-729-422-27 TRANSISTOR 2SD601A-Q C5154 1-104-664-11 ELECT 47μF 20% 25V Q5002 8-729-216-22 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q				•	1070						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	C5140	1 162 020 01	CED AMIC CUIP	0.1		2537				10μΗ	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					20%		L3105	1-410-4/0-11	INDUCTOR	10μΗ	
C5152 1-163-031-11 CERAMIC CHIP $0.01\mu\text{F}$ 50V $Q5001$ 8-729-422-27 TRANSISTOR 2SD601A-Q C5153 1-104-664-11 ELECT 47 μF 20% 25V $Q5002$ 8-729-216-22 TRANSISTOR 2SA1162-G C5154 1-104-664-11 ELECT 47 μF 20% 25V $Q5003$ 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1 μF 10% 25V $Q5004$ 8-729-422-27 TRANSISTOR 2SD601A-Q					_0,0						
Q5001 8-729-422-27 TRANSISTOR 2SD601A-Q Q5051 Respectively. Q5061 Respectively. Q5061					20%				<transistor></transistor>		
C5153 1-104-664-11 ELECT 47μF 20% 25V Q5002 8-729-216-22 TRANSISTOR 2SA1162-G C5154 1-104-664-11 ELECT 47μF 20% 25V Q5003 8-729-422-27 TRANSISTOR 2SD601A-Q C5157 1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q	C5152	1-163-031-11	CERAMIC CHIP	0.01μF		5UV	O5001	8-729-422-27	TRANSISTOR 2ST	0601A-O	
C5157 1-164-004-11 CERAMIC CHIP 0.1µF 10% 25V Q5004 8-729-422-27 TRANSISTOR 2SD601A-Q	C5153	1-104-664-11	ELECT	47μF	20%	25V	-			-	
							-				
	C313/	1-164-004-11	CERAMIC CHIP	0.1μF	10%	25 V	-				



REF. NO	D. PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION		ļ	REMARK
Q5051	8-729-216-22	TRANSISTOR 2SA	41162-G			R5059	1-216-025-91	METAL GLAZE	100	5%	1/10W
Q5051		TRANSISTOR 2SA				R5060		METAL GLAZE	1K	5%	1/10W
Q5053		TRANSISTOR 2SA				R5061		METAL GLAZE	4.7K	5%	1/10W
Q5054		TRANSISTOR 2SI				R5062		METAL GLAZE	1K	5%	1/10W
Q5055		TRANSISTOR 2SA				R5063		METAL GLAZE	100	5%	1/10W
Q5056	8-729-422-27	TRANSISTOR 2SI	D601A-Q			R5072	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
Q5057	8-729-422-27	TRANSISTOR 2SI	D601A-Q			R5073	1-216-049-91	METAL GLAZE	1K	5%	1/10W
Q5101	8-729-422-27	TRANSISTOR 2SI	D601A-Q			R5074	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
Q5102		TRANSISTOR 2SA				R5075		METAL GLAZE	560	5%	1/10W
Q5103	8-729-216-22	TRANSISTOR 2SA	A1162-G			R5076	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
Q5104	8-729-216-22	TRANSISTOR 2SA	A1162-G			R5077	1-216-045-00	METAL GLAZE	680	5%	1/10W
Q5105		TRANSISTOR 2SA				R5078		METAL GLAZE	470	5%	1/10W
Q5106		TRANSISTOR 2SI	-			R5079		METAL GLAZE	1K	5%	1/10W
Q5107		TRANSISTOR 2SI				R5080		METAL GLAZE	1K	5%	1/10W
Q5108		TRANSISTOR 2SI				R5081	1-216-041-00	METAL GLAZE	470	5%	1/10W
Q5109		TRANSISTOR 2SA				R5082		METAL GLAZE	100	5%	1/10W
Q5110		TRANSISTOR 2SA				R5084		METAL GLAZE	220	5%	1/10W
Q5111		TRANSISTOR 2SA				R5085		METAL GLAZE	220	5%	1/10W
Q5112	8-729-422-27	TRANSISTOR 2SI	D601A-Q			R5089		METAL GLAZE	2.2K	5%	1/10W
						R5090		METAL GLAZE	100	5%	1/10W
		<resistor></resistor>				R5091		METAL GLAZE	100	5%	1/10W
D #004	4.44.6.40.04	A COMPANY OF A COMPANY	4.77	-	4 (4 0 7 7 7	R5092		METAL GLAZE	100	5%	1/10W
R5001		METAL GLAZE	1K	5%	1/10W	R5102		CONDUCTOR, CH		-	4 /4 0 ***
R5002		METAL GLAZE	3.3K	5%	1/10W	R5103		METAL GLAZE	820	5%	1/10W
R5003		METAL GLAZE	2.2K	5%	1/10W	R5104	1-216-295-91	CONDUCTOR, CH	IIP		
R5004 R5005		METAL GLAZE METAL GLAZE	220 100	5% 5%	1/10W 1/10W	R5106	1 216 025 00	METAL GLAZE	270	5%	1/10W
K3003	1-210-023-91	METAL GLAZE	100	370	1/10 VV	R5100		METAL GLAZE	100K	5%	1/10W 1/10W
R5006	1-216-025-91	METAL GLAZE	100	5%	1/10W	R5107		METAL GLAZE	4.7K	5%	1/10W 1/10W
R5007		METAL GLAZE	100	5%	1/10W	R5109		METAL CHIP	560		1/10W
R5008		METAL GLAZE	330K	5%	1/10W	R5110		METAL CHIP	470		1/10W
R5009	1-216-041-00	METAL GLAZE	470	5%	1/10W						
R5010		METAL GLAZE	8.2K	5%	1/10W	R5112	1-216-049-91	METAL GLAZE	1K	5%	1/10W
						R5113	1-216-043-91	METAL GLAZE	560	5%	1/10W
R5011		METAL GLAZE	15K	5%	1/10W	R5114		METAL GLAZE	10K	5%	1/10W
R5012		METAL GLAZE	10K	5%	1/10W	R5115		METAL GLAZE	1K	5%	1/10W
R5013		METAL GLAZE	1.5K	5%	1/10W	R5116	1-216-043-91	METAL GLAZE	560	5%	1/10W
R5014		METAL GLAZE	100	5%	1/10W	D 5 1 1 7	1 216 040 01	METAL CLAZE	117	50/	1/10337
R5015	1-216-041-00	METAL GLAZE	470	5%	1/10W	R5117 R5118		METAL GLAZE METAL GLAZE	1K 8.2K	5% 5%	1/10W 1/10W
R5016	1-216-041-00	METAL GLAZE	470	5%	1/10W	R5110 R5120		METAL CHIP	220		1/10W 1/10W
R5010		METAL GLAZE	2.2K	5%	1/10W	R5120		METAL GLAZE	470	5%	1/10W
R5017		METAL GLAZE	2.2K	5%	1/10W	R5122		METAL GLAZE	1K	5%	1/10W
R5019		METAL GLAZE	330	5%	1/10W		/ 1				
R5021		METAL GLAZE	470	5%	1/10W	R5124	1-216-025-91	METAL GLAZE	100	5%	1/10W
						R5127	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R5022	1-216-047-91	METAL GLAZE	820	5%	1/10W	R5128	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R5023		METAL GLAZE	470	5%	1/10W	R5129		METAL GLAZE	560	5%	1/10W
R5024		METAL GLAZE	1K	5%	1/10W	R5130	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R5025		METAL GLAZE	12K	5%	1/10W	55100	1 21 5 0 12 0 1	A COMPANY OF A COMP	.	- 0.	4 /4 0 ***
R5026	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R5132 R5133		METAL GLAZE METAL GLAZE	560 22K	5% 5%	1/10W 1/10W
R5027		METAL GLAZE	1K	5%	1/10W	R5134	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R5033	1-216-025-91	METAL GLAZE	100	5%	1/10W	R5135	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R5051		METAL GLAZE	3.3K	5%	1/10W	R5136	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R5052		METAL GLAZE	1K	5%	1/10W						
R5053	1-216-065-91	METAL GLAZE	4.7K	5%	1/10W	R5137		METAL CHIP	220		1/10W
	10150==::	A COMPANY OF THE	4.577	-	1/107	R5138		METAL CHIP	3.3K		1/10W
R5054		METAL GLAZE	4.7K	5%	1/10W	R5139		METAL CHIP	3.3K		1/10W
R5055		METAL GLAZE	1K	5%	1/10W	R5140		METAL GLAZE	470	5%	1/10W
R5056 R5057		METAL GLAZE METAL GLAZE	10K 1K	5% 5%	1/10W 1/10W	R5141	1-210-033-00	METAL GLAZE	220	5%	1/10W
R5057		METAL GLAZE METAL GLAZE	1K 1K	5% 5%	1/10W 1/10W	R5142	1-216-041-00	METAL GLAZE	470	5%	1/10W
13030	1 210 047-91	QUALE	111	570	1/10 11	R5143		METAL GLAZE METAL GLAZE	220	5%	1/10W

KP-41T65C/53S65C/61S65C RM-Y136A RM-Y136A RM-Y136A



DEE NO	DADT NO	DESCRIPTION			DEMADE	DEE NO	DADT NO	DESCRIPTION			DEMADY
REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R5144	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	C047	1-163-010-11	CERAMIC CHIP	$0.0012 \mu F$	10%	50V
R5145		METAL GLAZE	270	5%	1/10W	C048		CERAMIC CHIP	$0.47\mu F$		25V
R5146	1-216-035-00	METAL GLAZE	270	5%	1/10W	C054	1-163-033-91	CERAMIC CHIP	0.022μF		50V
R5147	1-208-788-11	METAL CHIP	1.8K	0.50%	1/10W	C057	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
R5148		METAL CHIP	1.8K		1/10W	C092		CERAMIC CHIP	220PF	5%	50V
R5149		METAL GLAZE	560	5%	1/10W	C107		CERAMIC CHIP	0.01μF		50V
R5150		METAL CHIP	3.3K		1/10W	C108	1-104-664-11		47μF	20%	25V
R5151	1-208-794-11	METAL CHIP	3.3K	0.50%	1/10W	C109	1-126-916-11	ELECI	1000μF	20%	6.3V
R5152		METAL GLAZE	100	5%	1/10W	C110		CERAMIC CHIP	15PF	5%	50V
R5156		METAL GLAZE	100	5%	1/10W	C111		CERAMIC CHIP	12PF	5%	50V
R5157		METAL GLAZE	100	5%	1/10W	C119		CERAMIC CHIP	10PF	0.5PF	
R5158 R5159		METAL GLAZE METAL GLAZE	100 100	5% 5%	1/10W 1/10W	C120 C121		CERAMIC CHIP CERAMIC CHIP	10PF 10PF	0.5PF 0.5PF	
10137	1 210 023 71	WIETTIE GETIEE	100	370	1/10 **	CIZI	1 103 227 11	CLIVIIVII C CIIII	1011	0.511	30 1
R5160		METAL GLAZE	100	5%	1/10W	C124		CERAMIC CHIP	0.01µF		50V
R5161		METAL GLAZE	100	5%	1/10W	C201	1-126-960-11		1μF	20%	50V
R5163	1-216-025-91	METAL GLAZE	100	5%	1/10W	C203 C204	1-126-935-11	CERAMIC CHIP	470μF 0.1μF	20% 10%	16V 25V
						C204 C206		CERAMIC CHIP	0.1μF 0.1μF	10%	25 V 25 V
		<crystal></crystal>				C200	1-104-004-11	CLICAIVIIC CIIII	0.1μ1	1070	23 V
						C207		CERAMIC CHIP	$0.1 \mu F$	10%	25V
X5001		OSCILALTOR, CE				C208		CERAMIC CHIP	0.1μF	10%	25V
X5002		OSCILLATOR, CR				C209	1-126-964-11		10μF	20%	50V
X5051 X5101		VIBRATOR, CRYS				C210 C211	1-126-964-11 1-126-964-11		10μF 10μF	20% 20%	50V 50V
X5101 X5102		OSCILALTOR, CE				C211	1-120-704-11	LLLCI	Τομι	2070	30 V
						C212	1-126-964-11	ELECT	10μF	20%	50V
						C213	1-126-964-11		10μF	20%	50V
****	* * * * * * * * * * * * * * * * * *	*******	b	****	e ske	C216	1-126-964-11		10μF	20%	50V
****	******	*******	******	****	• •	C218 C219	1-163-031-11	CERAMIC CHIP	0.01μF 10μF	20%	50V 50V
*	A-1298-448-A	A BOARD, COMP	LETE			(21)	1-120-704-11	LLLCI	Τομι	2070	30 V
		*******	*****			C220	1-126-964-11		10μF	20%	50V
						C221		CERAMIC CHIP	0.1μF	10%	25V
*		CASE, SHIELD	D CW(.)			C224	1-104-664-11		47μF	20%	25V
	4-382-834-11	SCREW (M3X10),	P, SW (+)			C226 C227	1-126-964-11	CERAMIC CHIP	10μF 0.1μF	20% 10%	50V 25V
						C221	1-104-004-11	CERAINIC CIII	0.1μ1	1070	23 v
		<capacitor></capacitor>				C229	1-126-964-11		10μF	20%	50V
~~~						C230	1-126-964-11		10μF	20%	50V
C001		CERAMIC CHIP	0.01μF	200/	50V	C231	1-126-933-11		100μF	20%	16V
C004 C005	1-126-933-11 1-126-964-11		100μF 10μF	20% 20%	50V	C232 C302	1-104-004-11	CERAMIC CHIP	0.1μF 0.47μF	10% 20%	25V 50V
C006		CERAMIC CHIP	0.01µF	2070	50V	C302	1 120 737 11	LLLC I	0.47μ1	2070	30 <b>v</b>
C017		CERAMIC CHIP	0.047μF	10%	25V	C303	1-163-031-11	CERAMIC CHIP	$0.01 \mu F$		50V
						C304	1-126-964-11	ELECT	10μF	20%	50V
C018		CERAMIC CHIP	220PF	5%	50V	C305		CERAMIC CHIP	15PF	5%	50V
C019	1-126-960-11		1μF	20%	50V	C308		CERAMIC CHIP	0.1μF	10%	25V
C021 C024		CERAMIC CHIP CERAMIC CHIP	47PF 0.1μF	5% 10%	50V 25V	C309	1-126-933-11	ELECT	100μF	20%	16V
C024		CERAMIC CHIP	0.1µr 0.01µF	1070	50V	C310	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
			****			C311		CERAMIC CHIP	3300PF	5%	25V
C026	1-107-714-11	ELECT	10μF	20%	16V	C312	1-126-959-11	ELECT	$0.47\mu F$	20%	50V
C027	1-126-935-11		470μF	20%	16V	C313	1-130-495-00		$0.1 \mu F$	5%	50V
C028	1-107-714-11		10μF	20%	16V	C314	1-130-495-00	FILM	0.1µF	5%	50V
C032 C033		CERAMIC CHIP	0.1μF	10%	25V	C215	1 120 405 00	EII M	0.1uE	50/	50V
Cuss	1-105-259-91	CERAMIC CHIP	220PF	5%	50V	C315 C316	1-130-495-00 1-164-232-11	CERAMIC CHIP	0.1μF 0.01μF	5% 10%	50V 50V
C034	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V	C317		CERAMIC CHIP	0.01µF	10%	50V
C035	1-104-664-11		47μF	20%	25V	C318		CERAMIC CHIP	0.01µF	10%	50V
C036		CERAMIC CHIP	15PF	5%	50V	C319		CERAMIC CHIP	0.1µF	10%	25V
C037		CERAMIC CHIP	27PF	5%	50V	a		ann 1	0.4 -	4.0-	0.51-
C038	1-126-960-11	ELECT	1μF	20%	50V	C320		CERAMIC CHIP	0.1μF	10%	25V
C045	1_163_017_00	CERAMIC CHIP	0.0047μF	10%	50V	C321 C322	1-126-963-11 1-130-495-00		4.7μF 0.1μF	20% 5%	50V 50V
C045		CERAMIC CHIP	0.0047µF	1070	50V	C322 C323	1-130-493-00		0.1μF 0.1μF	5%	100V



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C324	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V	C1103	1-126-933-11	ELECT	100μF	20%	16V
						C1104		CERAMIC CHIP	0.0022µF	10%	50V
C325	1-126-959-11	ELECT	$0.47\mu F$	20%	50V	C1105	1-126-960-11	ELECT	1μF	20%	50V
C326	1-126-964-11	ELECT	10μF	20%	50V	C1106	1-126-933-11	ELECT	100μF	20%	16V
C329	1-163-017-00	CERAMIC CHIP	$0.0047 \mu F$	10%	50V	C1107	1-104-664-11	ELECT	47μF	20%	25V
C330	1-163-263-11	CERAMIC CHIP	330PF	5%	50V						
C331	1-126-959-11	ELECT	$0.47\mu F$	20%	50V	C1108	1-126-964-11		10μF	20%	50V
						C1109	1-126-933-11		100μF	20%	16V
C332		CERAMIC CHIP	0.01µF	10%	50V	C1110		CERAMIC CHIP	0.0022μF	10%	50V
C333		CERAMIC CHIP	0.01µF	10%	50V	C1111	1-126-960-11		1μF	20%	50V
C334		CERAMIC CHIP 0	•	5%	50V	C1112	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C335 C337	1-126-935-11 1-126-960-11		470μF 1μF	20% 20%	16V 50V	C1113	1-126-964-11	ELECT	10μF	20%	50V
C331	1-120-900-11	ELECT	ιμι	2070	30 V	C1113 C1114		CERAMIC CHIP	0.01μF	2070	50V
C338	1-126-961-11	FI FCT	2.2µF	20%	50V	C1114 C1115		CERAMIC CHIP	0.01µF		50V
C339	1-126-959-11		0.47μF	20%	50V	C1116		CERAMIC CHIP	0.01µF		50V
C342	1-130-495-00		0.47μI 0.1μF	5%	50V	C1117		CERAMIC CHIP	0.01µF		50V
C344		CERAMIC CHIP	100PF	5%	50V	CIIII	1 103 031 11	CLIU IIVIIC CIIII	0.01μ1		501
C345		CERAMIC CHIP	100PF	5%	50V	C1118	1-163-031-11	CERAMIC CHIP	0.01µF		50V
00.0	1 100 201 11	0214 11/110 01111	10011	270	20.	C1119	1-126-968-11		100μF	20%	50V
C349	1-163-245-11	CERAMIC CHIP	56PF	5%	50V	C1120	1-126-933-11		100µF	20%	16V
C351		CERAMIC CHIP	0.1µF	10%	25V	C1120	1-104-664-11		47μF	20%	25V
C401	1-126-964-11		10μF	20%	50V	C1501		CERAMIC CHIP	0.001µF	10%	50V
C402	1-126-964-11		10μF	20%	50V					,-	
C403	1-137-367-11		0.0033µF	5%	50V	C1502	1-107-504-11	CERAMIC	10PF	0.5PF	500V
						C1503	1-136-177-00		1μF	5%	50V
C404	1-137-367-11	FILM	0.0033µF	5%	50V	C1506	1-126-969-11		220μF	20%	50V
C405	1-137-372-11		0.022µF	5%	50V	C1507	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C406	1-130-495-00	FILM	0.1µF	5%	50V	C1508	1-137-401-11		$0.22\mu F$	10%	100V
C407	1-126-960-11	ELECT	1μF	20%	50V				•		
C408	1-137-367-11	FILM	0.0033µF	5%	50V	C1509	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
						C1510	1-126-942-61	ELECT	1000μF	20%	25V
C409	1-137-367-11	FILM	$0.0033 \mu F$	5%	50V	C1511	1-126-942-61	ELECT	1000μF	20%	25V
C410	1-137-372-11	FILM	$0.022 \mu F$	5%	50V	C1513	1-163-031-11	CERAMIC CHIP	$0.01 \mu F$		50V
C411	1-130-495-00	FILM	0.1µF	5%	50V	C1514	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C412	1-126-933-11	ELECT	100μF	20%	16V						
C413	1-128-551-11	ELECT	22μF	20%	25V	C1517	1-126-964-11	ELECT	10μF	20%	50V
						C1518	1-126-933-11	ELECT	100μF	20%	16V
C414		CERAMIC CHIP	$0.1\mu F$		25V	C1519	1-126-933-11		100μF	20%	16V
C415	1-126-964-11		10μF	20%	50V	C1520	1-126-964-11		10μF	20%	50V
C416	1-126-964-11		10μF	20%	50V	C1521	1-164-161-11	CERAMIC CHIP	$0.0022 \mu F$	10%	50V
C417	1-126-964-11		10μF	20%	50V						
C418	1-104-664-11	ELECT	47μF	20%	25V	C1522		CERAMIC CHIP	0.1μF	10%	25V
0410	1 100 551 11	EL ECT	22 5	200/	2511	C1523		CERAMIC CHIP	470PF	10%	50V
C419	1-128-551-11		22μF	20%	25V	C1524	1-137-150-11		0.01μF	10%	100V
C422	1-104-664-11		47μF	20%	25V	C1525	1-106-220-00		0.1μF	10%	100V
C424	1-126-961-11		2.2μF	20%	50V	C1601	1-126-935-11	ELECI	470μF	20%	16V
C425	1-126-935-11		470μF	20%	16V	C1602	1 126 767 11	EI ECT	1000uE	200/	16V
C426	1-126-964-11	ELECI	10μF	20%	50V	C1602 C1603	1-126-767-11		1000μF 1000μF	20% 20%	16V 6.3V
C427	1-126-933-11	ELECT	100μF	20%	16V	C1603 C1604	1-126-916-11 1-126-934-11		1000μF 220μF	20%	6.3 V 16V
C427 C428	1-126-933-11		100μF 220μF	20%	50V	C1604 C1605		CERAMIC CHIP	220μF 0.01μF	20%	50V
C428 C429	1-126-969-11		220μΓ 47μF	20%	50V	C1605		CERAMIC CHIP	0.01μF 0.01μF		50V
C429	1-126-964-11		47μΓ 10μF	20%	50V	C1000	1-103-031-11	CERAINIC CIII	0.01μ1		30 V
C430	1-126-969-11		220μF	20%	50V	C1607	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C431	1-120-909-11	ELECT	220μ1	2070	30 V	C1607		CERAMIC CHIP	0.01µF		50V
C432	1-136-173-00	FII M	0.47µF	5%	50V	C1609		CERAMIC CHIP	0.01µF		50V
C433	1-130-495-00		0.47μI 0.1μF	5%	50V	C1610	1-126-933-11		100μF	20%	16V
C434	1-128-550-11		2200μF	20%	50V	C1611		CERAMIC CHIP	0.01µF	_0/0	50V
C435	1-130-495-00		0.1μF	5%	50V	CIOII	1 105 051 11	CERUINITE CITI	0.01μ1		301
C436	1-130-473-00		4700μF	20%	25V			<connector></connector>			
C 130	1 120 5-10-11		1,00μ1	2070	20 1			COLUMN			
C437	1-128-548-11	ELECT	4700µF	20%	25V	CN001 *	* 1-564-507-11	PLUG, CONNECT	OR 4P		
C440	1-126-964-11		10μF	20%	50V			PLUG, CONNECT			
C441	1-126-964-11		10μF	20%	50V			CONNECTOR, BO		OARD	10P
C1101		CERAMIC CHIP	0.01µF		50V	CN004		CONNECTOR, BO			
C1102		CERAMIC CHIP	0.01µF		50V			CONNECTOR, BO			



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
		PLUG, CONNECTOR 5P		D1102	8-719-977-28	DIODE DTZ10B		
CN304	1-770-155-21	PLUG, CONNECTOR 9P CONNECTOR, BOARD TO BOARD		D1103		DIODE DTZ10B		
CN305		CONNECTOR, BOARD TO BOARD	D 20P	D1104		DIODE DTZ10B		
CN401	* 1-564-507-11	PLUG, CONNECTOR 4P		D1105 D1106		DIODE DTZ10B DIODE DTZ10B		
CN402	* 1-564-506-11	PLUG, CONNECTOR 3P		D1100 D1107		DIODE DTZ10B		
		TAB (CONTACT)		Dilor	0 /17 /// 20	DIODEDIZIOD		
		PLUG, CONNECTOR 11P		D1501	8-719-109-89	DIODE RD5.6ESE	32	
		PLUG, CONNECTOR 3P		D1502	8-719-908-03	DIODE GP08D		
CN1601	* 1-774-183-11	CONNECTOR, BOARD TOBOARD	D10P					
CN1602	* 1_774_183_11	CONNECTOR, BOARD TOBOARD	)10P			<ferrite bead<="" td=""><td>&gt;</td><td></td></ferrite>	>	
CIV1002	1-774-163-11	CONNECTOR, BOARD TOBOARD	7101	FB1102	1-414-135-11	FERRITE	0μΗ	
		<diode></diode>		121102	1 111 100 11	1214412	op. 1	
D001		DIODE 1SS133T-77				<ic></ic>		
D002		DIODE 1SS133T-77		TG001	0.752.004.06	IC CUPOSOSCI OC	200	
D003 D004		DIODE 1SS133T-77 DIODE 1SS133T-77		IC001 IC002		IC CXP85856A-00 IC CXP85112B-61		
D004 D007		DIODE 1331331-77 DIODE RD5.6ESB2		IC002 IC003		IC PST9143NL	33	
D007	0-717-107-07	DIODE RD3.0ESB2		IC003		IC PST9143NL		
D010	8-719-109-89	DIODE RD5.6ESB2		IC007		IC X24C04S8		
D011		DIODE RD5.6ESB2						
D202		DIODE RD10ESB2		IC201		IC MM1313AD/		
D203		DIODE RD5.6ESB2		IC301 IC401		IC CXA2025AS		
D206	8-719-977-28	DIODE DTZ10B		IC401 IC402		IC BH3856FS-E2 IC UPC4558G2		
D207	8-719-977-28	DIODE DTZ10B		IC402	8-759-089-13			
D208		DIODE DTZ10B						
D209	8-719-977-28	DIODE DTZ10B		IC1101	8-759-231-53	IC TA7805S		
D210		DIODE DTZ10B		IC1501	8-759-192-71			
D211	8-719-977-28	DIODE DTZ10B		IC1502		IC CA0007AM		
D212	8-719-977-28	DIODE DTZ10B		IC1601 IC1602	8-759-198-03 8-759-231-53	IC PQ09RF21		
D212		DIODE DTZ10B		101002	0 737 231 33	10 17170035		
D214		DIODE RD10ESB2				<jack></jack>		
D215		DIODE RD10ESB2						
D216	8-719-110-17	DIODE RD10ESB2		J203	1-507-667-00			
D217	9 710 110 17	DIODE RD10ESB2		J205 J206		JACK BLOCK, PI JACK BLOCK, PI		
D217 D218		DIODE RD10ESB2		J208		JACK BLOCK, PI		
D219		DIODE RD10ESB2		J209		TERMINAL BLO		
D220	8-719-110-17	DIODE RD10ESB2						
D221	8-719-110-17	DIODE RD10ESB2						
D222	0.710.110.17	DIODE DD10EGD2				<chip conduct<="" td=""><td>ΓOR&gt;</td><td></td></chip>	ΓOR>	
D222 D225		DIODE RD10ESB2 DIODE RD10ESB2		JR003	1 216 205 01	CONDUCTOR, CI	шр	
D225 D226		DIODE RD10ESB2		JR201		CONDUCTOR, CI		
D232		DIODE MTZJ-T-77-36B		JR202		CONDUCTOR, CI		
D236	8-719-110-17	DIODE RD10ESB2		JR1501	1-216-295-91	CONDUCTOR, CI	HIP	
				JR1502	1-216-295-91	CONDUCTOR, CI	HIP	
D237		DIODE RD10ESB2		ID 1 (0.1	1 216 205 01	CONDITION OF	ш	
D238 D239		DIODE RD10ESB2 DIODE 1SS133T-77		JR1601 JR1602		CONDUCTOR, CI		
D239 D240		DIODE 1SS1331-77 DIODE 1SS133T-77		JR1602 JR1603		CONDUCTOR, CI		
D241		DIODE 1SS133T-77		JR1604		CONDUCTOR, CI		
				JR1605		CONDUCTOR, CI		
D305		DIODE RD10ESB2		TD 4		aa.m	****	
D401		DIODE 1SS133T-77		JR1607		CONDUCTOR, CI		
D403 D405		DIODE MTZJ-T-77-36B DIODE 1SS133T-77		JR1609 JR1610		CONDUCTOR, CI		
D405 D406		DIODE 1SS133T-77		JR1611		CONDUCTOR, CI		
				JR1612		CONDUCTOR, CI		
D408		DIODE 1SS133T-77						
D410		DIODE MTZJ-T-77-36B		JR1613	1-216-295-91	CONDUCTOR, CI	HIP	
D411		DIODE MTZL 33R						
D1101	0-717-782-20	DIODE MTZJ-33B	ı					



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
JR1614 JR1615 JR1617 JR1619	1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		Q209 Q213 Q214 Q216	8-729-216-22 8-729-216-22	TRANSISTOR DT TRANSISTOR 2SA TRANSISTOR 2SA TRANSISTOR DT	A1162-G A1162-G	
JR1620 JR1621 JR1622 JR1623 JR1624	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP		Q217 Q218 Q219 Q220 Q226	8-729-422-27 8-729-422-27 8-729-422-27	TRANSISTOR DT TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI	D601A-Q D601A-Q D601A-Q	
JR1625 JR1627 JR1629	1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP <coil></coil>		Q301 Q302 Q303 Q304 Q305	8-729-216-22 8-729-422-27 8-729-422-27	TRANSISTOR 2S/ TRANSISTOR 2S/ TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI	A1162-G D601A-Q D601A-Q	
L002 L003 L004 L005	1-216-295-91	INDUCTOR 100μH INDUCTOR 100μH CONDUCTOR, CHIP CONDUCTOR, CHIP		Q306 Q307 Q308 Q311 Q312	8-729-422-27 8-729-216-22 8-729-422-27	TRANSISTOR 2SA TRANSISTOR 2SA TRANSISTOR 2SA TRANSISTOR 2SI TRANSISTOR 2SI	D601A-Q A1162-G D601A-Q	
L006 L007 L201 L302 L303	1-410-470-11 1-410-482-31 1-410-478-11 1-410-482-31 1-410-470-11	INDUCTOR 100μH INDUCTOR 47μH INDUCTOR 100μH INDUCTOR 10μH		Q313 Q314 Q402 Q403 Q405	8-729-422-27 1-801-806-11 8-729-027-38	TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR DT TRANSISTOR DT TRANSISTOR 2SA	D601A-Q C144EKA-T146 A144EKA-T146	
L1101 L1103 L1104 L1105 L1106	1-410-478-11 1-410-478-11 1-410-470-11 1-410-478-11	INDUCTOR 47μH INDUCTOR 47μH INDUCTOR 10μH INDUCTOR 47μH		Q406 Q408 Q409 Q410 Q411	8-729-422-27 8-729-422-27 8-729-422-27	TRANSISTOR 2SA TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR DT	D601A-Q D601A-Q D601A-Q	
L1501 L1502 L1503 L1601	1-406-663-21 1-412-533-21 1-412-533-21 1-406-975-21	INDUCTOR 47μH INDUCTOR 47μH		Q1101 Q1501 Q2105 Q2106	8-729-422-27 8-729-422-27	TRANSISTOR DT TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI	D601A-Q D601A-Q	
PS401	1-532-984-11	<ic link=""> LINK, IC 2A/90V</ic>		R003	1-216-295-91	<resistor> CONDUCTOR, CH</resistor>	НР	
10.01	1002 301 11	<transistor></transistor>		R004 R005 R006 R007	1-216-033-00 1-216-033-00 1-216-033-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	220 5% 220 5% 220 5% 220 5% 22K 5%	1/10W 1/10W 1/10W 1/10W
Q001 Q002 Q003 Q004 Q005	8-729-027-38 8-729-027-38 8-729-216-22	TRANSISTOR 2SD601A-Q TRANSISTOR DTA144EKA-T146 TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G		R008 R009 R010 R011	1-216-073-00 1-216-033-00 1-216-033-00 1-216-033-00	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	10K 5% 220 5% 220 5% 220 5%	1/10W 1/10W 1/10W 1/10W
Q006 Q007 Q008 Q009 Q013	1-801-806-11 8-729-422-27 8-729-027-38	TRANSISTOR DTA144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-Q TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SD601A-Q		R012 R013 R014 R015 R016	1-216-033-00 1-216-033-00 1-216-025-91 1-216-025-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	220 5% 220 5% 220 5% 100 5% 100 5%	1/10W 1/10W 1/10W 1/10W 1/10W
Q015 Q016 Q017 Q201 Q206	8-729-422-27 8-729-422-27 8-729-422-27	TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q TRANSISTOR 2SD601A-Q TRANSISTOR DTC143TKA-T146		R017 R018 R019 R020 R021	1-216-065-91 1-216-097-91 1-216-057-00 1-216-089-91	METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE	4.7K 5% 4.7K 5% 100K 5% 2.2K 5% 47K 5%	1/10W 1/10W 1/10W 1/10W 1/10W
Q207	1-801-806-11	TRANSISTOR DTC144EKA-T146		R023 R024 R025	1-216-121-91	METAL GLAZE METAL GLAZE METAL GLAZE	4.7K 5% 1M 5% 100K 5%	1/10W 1/10W 1/10W



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R026	1-216-033-00	METAL GLAZE	220	5%	1/10W	R117	1-216-033-00	METAL GLAZE	220	5%	1/10W
R027	1-216-065-91	METAL GLAZE	4.7K	5%	1/10W						
R030	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R118		METAL GLAZE	220	5%	1/10W
D022	1 216 065 01	METAL CLAZE	4.717	50/	1 /1 0337	R119		METAL GLAZE	220	5%	1/10W
R033		METAL GLAZE	4.7K	5% 5%	1/10W	R120		METAL GLAZE	220 220	5% 5%	1/10W
R034 R035		METAL GLAZE METAL GLAZE	10K 4.7K	5%	1/10W 1/10W	R121 R122		METAL GLAZE METAL GLAZE	220	5% 5%	1/10W 1/10W
R036		METAL GLAZE	220	5%	1/10W	K122	1-210-033-00	WILLIAL GLAZE	220	570	1/10 **
R037		METAL GLAZE	220	5%	1/10W	R123	1-216-033-00	METAL GLAZE	220	5%	1/10W
						R124	1-216-033-00	METAL GLAZE	220	5%	1/10W
R038	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R125	1-216-033-00	METAL GLAZE	220	5%	1/10W
R039	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R127	1-216-033-00	METAL GLAZE	220	5%	1/10W
R040		METAL GLAZE	4.7K	5%	1/10W	R128	1-216-033-00	METAL GLAZE	220	5%	1/10W
R041		METAL GLAZE	100	5%	1/10W	D.1.0.1	1 21 - 0 - 7 01	ACCURATE OF A CO.	4.577		4 /4 0 7 7 7
R042	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R131		METAL GLAZE	4.7K	5%	1/10W
R043	1 216 065 01	METAL GLAZE	4 7V	5%	1/10W	R132 R133		METAL GLAZE METAL GLAZE	4.7K 4.7K	5% 5%	1/10W 1/10W
R045		METAL GLAZE	4.7K 10K	5%	1/10W 1/10W	R133		METAL GLAZE	4.7K 2.2K	5% 5%	1/10W 1/10W
R046		METAL GLAZE	1K	5%	1/10W	R148		METAL GLAZE	2.2K 2.2K	5%	1/10W
R047		METAL GLAZE	2.2K	5%	1/10W	10110	1 210 037 00	WIETTE GETTEE	2.211	570	1/10 11
R048		METAL GLAZE	4.7K	5%	1/10W	R149	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
						R154	1-216-025-91	METAL GLAZE	100	5%	1/10W
R050		METAL GLAZE	10K	5%	1/10W	R155	1-216-025-91	METAL GLAZE	100	5%	1/10W
R053	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R156	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R054		METAL GLAZE	220	5%	1/10W	R157	1-216-017-91	METAL GLAZE	47	5%	1/10W
R056		METAL GLAZE	1M	5%	1/10W						
R057	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R158		METAL GLAZE	470K	5%	1/10W
D059	1 216 040 01	METAL GLAZE	1 <i>V</i>	50/	1/10W	R159		METAL GLAZE	47 470K	5%	1/10W 1/10W
R058 R059		METAL GLAZE	1K 220	5% 5%	1/10W 1/10W	R160 R161		METAL GLAZE METAL GLAZE	470K 47	5% 5%	1/10W 1/10W
R060		METAL GLAZE	220	5%	1/10W 1/10W	R163		METAL GLAZE	220	5%	1/10W
R061		METAL GLAZE	1K	5%	1/10W	Kios	1 210 033 00	WIETTE GETTEE	220	570	1/10 **
R063		METAL GLAZE	10K	5%	1/10W	R164	1-216-033-00	METAL GLAZE	220	5%	1/10W
						R165		METAL GLAZE	220	5%	1/10W
R064	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R171	1-216-035-00	METAL GLAZE	270	5%	1/10W
R065		METAL GLAZE	1K	5%	1/10W	R172		METAL GLAZE	270	5%	1/10W
R066		METAL GLAZE	1K	5%	1/10W	R173	1-216-035-00	METAL GLAZE	270	5%	1/10W
R067		METAL GLAZE	220	5%	1/10W	D204	4 2 40 255 44	GARRON	0.45		4 / 4 7 7 7 7
R068	1-216-033-00	METAL GLAZE	220	5%	1/10W	R204	1-249-377-11		0.47	5%	1/4W F
R070	1-216-033-00	METAL GLAZE	220	5%	1/10W	R206 R213		METAL GLAZE METAL GLAZE	75 470K	5% 5%	1/10W 1/10W
R071		METAL GLAZE	220	5%	1/10W	R213		METAL GLAZE	470K	5%	1/10W
R072		METAL GLAZE	220	5%	1/10W	R215		METAL GLAZE	470K	5%	1/10W
R073		METAL GLAZE	220	5%	1/10W						
R074	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R216	1-216-113-00	METAL GLAZE	470K	5%	1/10W
						R217		METAL GLAZE	470K	5%	1/10W
R075		METAL GLAZE	1K	5%	1/10W	R218		METAL GLAZE	75	5%	1/10W
R076		METAL GLAZE	220	5%	1/10W	R219		METAL GLAZE	470K	5%	1/10W
R077		METAL GLAZE	1M	5%	1/10W	R220	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R078 R080		METAL GLAZE	100K	5%	1/10W	D221	1 216 022 00	METAL GLAZE	75	50/	1/10337
KUOU	1-210-073-00	METAL GLAZE	10K	5%	1/10W	R221 R222		METAL GLAZE	75 75	5% 5%	1/10W 1/10W
R081	1-216-033-00	METAL GLAZE	220	5%	1/10W	R223		METAL GLAZE	75 75	5%	1/10W
R084		METAL GLAZE	10K	5%	1/10W	R224		METAL GLAZE	47	5%	1/10W
R085		METAL GLAZE	100K	5%	1/10W	R225		METAL GLAZE	2.2K	5%	1/10W
R086	1-216-033-00	METAL GLAZE	220	5%	1/10W						
R087	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R227		METAL GLAZE	56	5%	1/10W
						R229		METAL GLAZE	1K	5%	1/10W
R088		METAL GLAZE	4.7K	5%	1/10W	R230		METAL GLAZE	470K	5%	1/10W
R090		METAL GLAZE	4.7K	5%	1/10W	R231		METAL GLAZE	470K	5%	1/10W
R091		METAL GLAZE	2.2K	5% 5%	1/10W	R235	1-216-041-00	METAL GLAZE	470	5%	1/10W
R092 R099		METAL GLAZE METAL GLAZE	2.2K 330	5% 5%	1/10W 1/10W	R236	1-216-041-00	METAL GLAZE	470	5%	1/10W
ハリフブ	1-210-03/-00	MILIAL OLAZE	550	J 70	1/10 44	R230 R241		METAL GLAZE	470	5% 5%	1/10W 1/10W
R111	1-216-033-00	METAL GLAZE	220	5%	1/10W	R245		METAL GLAZE	470	5%	1/10W
R112		METAL GLAZE	220	5%	1/10W	R255		METAL GLAZE	10K	5%	1/10W
R113		METAL GLAZE	220	5%	1/10W	R258		METAL GLAZE	47K	5%	1/10W
R115	1-216-033-00	METAL GLAZE	220	5%	1/10W						



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
D260	1 216 072 00	METAL GLAZE	10K	5%	1/10W	R337	1 216 022 00	METAL GLAZE	220	5%	1/10W
R260 R261		METAL GLAZE	4.7K	5%	1/10W 1/10W	R338		METAL GLAZE	220	5% 5%	1/10W 1/10W
R262		METAL GLAZE	82K	5%	1/10W	R339		METAL GLAZE	220	5%	1/10W
R263	1-216-095-00	METAL GLAZE	82K	5%	1/10W						
R264	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R340		METAL GLAZE	100	5%	1/10W
R265	1 216 007 01	METAL GLAZE	100K	5%	1/10W	R342 R343		METAL GLAZE METAL GLAZE	100 10K	5% 5%	1/10W 1/10W
R266		METAL GLAZE	2.2K	5%	1/10W 1/10W	R344		METAL GLAZE	5.6K	5% 5%	1/10W 1/10W
R268		METAL GLAZE	220K	5%	1/10W	R345		METAL GLAZE	330K	5%	1/10W
R275	1-216-033-00	METAL GLAZE	220	5%	1/10W						
R276	1-216-033-00	METAL GLAZE	220	5%	1/10W	R346		METAL GLAZE	1.5K	5%	1/10W
D.255	1 21 6 02 6 01	METAL CLASE	100	50/	1/1011	R347		METAL GLAZE	1K	5%	1/10W
R277 R278		METAL GLAZE METAL GLAZE	100 100	5% 5%	1/10W 1/10W	R348 R349		METAL GLAZE METAL GLAZE	3.3M 1K	5% 5%	1/10W 1/10W
R279		METAL GLAZE	100	5%	1/10W 1/10W	R350		METAL GLAZE	1K	5%	1/10W
R280		METAL GLAZE	470	5%	1/10W					- , -	-,
R281	1-216-041-00	METAL GLAZE	470	5%	1/10W	R351		METAL GLAZE	3.3K	5%	1/10W
						R352		METAL GLAZE	2.7K	5%	1/10W
R282		METAL GLAZE	470	5%	1/10W	R353		METAL GLAZE	2.7K	5%	1/10W
R283 R284		METAL GLAZE METAL GLAZE	470 470	5% 5%	1/10W 1/10W	R354 R355		METAL GLAZE METAL GLAZE	10K 47K	5% 5%	1/10W 1/10W
R285		METAL GLAZE	470	5%	1/10W 1/10W	KSSS	1-210-069-91	WIETAL GLAZE	4/K	370	1/10 W
R286		METAL GLAZE	100	5%	1/10W	R356	1-216-025-91	METAL GLAZE	100	5%	1/10W
						R357	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R287		METAL GLAZE	100	5%	1/10W	R361		METAL GLAZE	470	5%	1/10W
R288		METAL GLAZE	100	5%	1/10W	R362		METAL GLAZE	1K	5%	1/10W
R289 R290		METAL GLAZE METAL GLAZE	100 100	5% 5%	1/10W 1/10W	R363	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R290 R291		METAL GLAZE	100	5%	1/10W 1/10W	R364	1-208-783-11	METAL GLAZE	1.1K	0.50%	1/10W
1(2)1	1 210 023 71	WIETTE GETTEE	100	570	1/10 **	R365		METAL GLAZE	22K	5%	1/10W
R294	1-216-043-91	METAL GLAZE	560	5%	1/10W	R366		METAL GLAZE	47	5%	1/10W
R295		METAL GLAZE	10K	5%	1/10W	R367		METAL GLAZE	27K	5%	1/10W
R296		METAL GLAZE	100	5%	1/10W	R368	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R297 R299		METAL GLAZE METAL GLAZE	68K 470	5% 5%	1/10W 1/10W	R369	1 216 072 00	METAL GLAZE	10K	5%	1/10W
K299	1-210-041-00	WIETAL GLAZE	470	370	1/10 W	R370		METAL GLAZE	27K	5%	1/10W 1/10W
R301	1-216-041-00	METAL GLAZE	470	5%	1/10W	R371		METAL GLAZE	15K	5%	1/10W
R302	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R372	1-216-065-91	METAL GLAZE	4.7K	5%	1/10W
R303		METAL GLAZE	1K	5%	1/10W	R373	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R304		METAL GLAZE	1K	5%	1/10W	D274	1 216 040 01	METAL CLAZE	177	50/	1 /1 0337
R305	1-216-033-00	METAL GLAZE	220	5%	1/10W	R374 R375		METAL GLAZE METAL GLAZE	1K 470K	5% 5%	1/10W 1/10W
R306	1-216-025-91	METAL GLAZE	100	5%	1/10W	R376		METAL GLAZE	2.2M	5%	1/10W 1/10W
R307		METAL GLAZE	1K	5%	1/10W	R377		METAL GLAZE	10K	5%	1/10W
R308	1-216-017-91	METAL GLAZE	47	5%	1/10W	R378	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R309		METAL GLAZE	47	5%	1/10W						
R310	1-216-017-91	METAL GLAZE	47	5%	1/10W	R379		METAL GLAZE	10K	5%	1/10W
R314	1-216-033-00	METAL GLAZE	220	5%	1/10W	R380 R381		METAL GLAZE METAL GLAZE	47K 100K	5% 5%	1/10W 1/10W
R315		METAL GLAZE	220	5%	1/10W	R384	1-249-377-11		0.47	5%	1/4W F
R319	1-216-033-00	METAL GLAZE	220	5%	1/10W	R401	1-249-377-11	CARBON	0.47	5%	1/4W F
R320		METAL GLAZE	220	5%	1/10W						
R322	1-216-077-00	METAL GLAZE	15K	5%	1/10W	R402	1-249-377-11		0.47	5%	1/4W F
D222	1 216 025 01	METAL CLAZE	100	50/	1/10337	R403		METAL GLAZE METAL GLAZE	10K	5% 5%	1/10W
R323 R324		METAL GLAZE METAL GLAZE	100 100	5% 5%	1/10W 1/10W	R404 R406		METAL GLAZE	1K 10K	5% 5%	1/10W 1/10W
R325		METAL GLAZE	100	5%	1/10W	R407		METAL GLAZE	100	5%	1/10W
R326		METAL GLAZE	1.5K		1/10W			_			
R327	1-216-049-91	METAL GLAZE	1K	5%	1/10W	R408		METAL GLAZE	100	5%	1/10W
D000	1.016.040.01	METAL CLICE	117	501	1/1033	R412		METAL GLAZE	100	5%	1/10W
R328		METAL GLAZE METAL GLAZE	1K	5% 5%	1/10W	R413		METAL GLAZE	100	5% 5%	1/10W
R330 R331		METAL GLAZE	100 100	5% 5%	1/10W 1/10W	R414 R415		METAL GLAZE METAL GLAZE	1K 470	5% 5%	1/10W 1/10W
R332		METAL GLAZE	270	5%	1/10W	11.10	210 011 00	OLILL		2,0	-, -0 11
R333		METAL GLAZE	15K		1/10W	R416	1-216-041-00	METAL GLAZE	470	5%	1/10W
						R418		METAL GLAZE	100	5%	1/10W
R334		METAL GLAZE	560	5%	1/10W	R422		METAL GLAZE	2.2K	5% 5%	1/10W
R335	1-210-055-00	METAL GLAZE	220	5%	1/10W	R423	1-210-025-91	METAL GLAZE	100	5%	1/10W



The components identified by 

in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

The componants identified by shading and mark ≜ are critical for safety.
Replace only with part number specified.

			originally	acca.							
REF. NO.	PART NO.	DESCRIPTION		F	REMARK	REF. NO	O. PART NO.	DESCRIPTION			REMARK
R424	1-216-089-91	METAL GLAZE	47K	5%	1/10W	R2208		METAL GLAZE	470 470	5%	1/10W
R425	1-216-041-00	METAL GLAZE	470	5%	1/10W	R2209	1-210-041-00	METAL GLAZE	470	5%	1/10W
R427		METAL GLAZE	1.2K	5%	1/10W			<thermistor></thermistor>			
R428		METAL GLAZE	1K	5%	1/10W			(11121111111111111111111111111111111111			
						TI1150	1 1 900 102 00	THEDMICTOR			
R429		METAL GLAZE	1K	5%	1/10W	TH150	1 1-800-193-00	THERMISTOR			
R430	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W						
R432	1 216 001 00	METAL CLAZE	22K	5%	1/10W			<tuner></tuner>			
		METAL GLAZE			1/10W 1/10W			<1UNEK>			
R433		METAL GLAZE	27	5%		TT 1110	1 0 500 240 00	TIMED FOR DEE	TT/A 40.4		
R434		METAL GLAZE	12K	5%	1/10W			TUNER, FSS BTF-			
R435 R436		METAL GLAZE	12K 27	5%	1/10W 1/10W	10110.	2 8-398-339-00	TUNER, FSS BTF-	LA402		
K450	1-210-011-00	METAL GLAZE	21	5%	1/10 W						
R437	1-249-418-11	CADDON	1.2K	5%	1/4W F			<crystal></crystal>			
			1.2K 1.2K					<ck151al></ck151al>			
R438	1-249-418-11			5%	1/4W F	37001	1 577 250 21	MIDD ATOD CED A	MIC		
R439	1-249-389-11		4.7	5%	1/4W F	X001		VIBRATOR, CERA			
R440	1-249-389-11		4.7	5%	1/4W F	X002		VIBRATOR, CRYS			
R441	1-216-073-00	METAL GLAZE	10K	5%	1/10W	X301		OSCILLATOR, CR			
						X304	1-577-611-11	OSCILALTOR, CE	RAMIC		
R442		METAL GLAZE	100	5%	1/10W						
R443		CONDUCTOR, CI									
R444		CONDUCTOR, CI				*****	******	******	********	*****	**
R1101		METAL GLAZE	4.7K	5%	1/10W						
R1102	1-216-083-00	METAL GLAZE	27K	5%	1/10W		* A-1316-392-A	G BOARD, COMP			
D1100	1 21 5 500 11	A FERRAL OF A FER	2077	<b>-</b>	4 /4 0777					41T650	C/61S65C)
R1103		METAL GLAZE	39K	5%	1/10W			*********			
R1104		METAL GLAZE	1K	5%	1/10W		* A-1316-393-A	G BOARD, COMP		-53S65	C)
R1105		METAL GLAZE	39K	5%	1/10W			*********	*****		
R1106		METAL GLAZE	27K	5%	1/10W						
R1107	1-216-065-91	METAL GLAZE	4.7K	5%	1/10W			SHIELD, TRANSF			
								PLATE, TRANSFO		IELD	
R1108		METAL OXIDE	22K	5%	2W F		4-382-854-11	SCREW (M3X10),	P, SW (+)		
R1501		METAL OXIDE	1.5	5%	1W F						
R1502		METAL CHIP	10K		1/10W						
R1504	1-216-675-11	METAL CHIP	10K	0.50%	1/10W			<capacitor></capacitor>			
R1505	1-215-857-11	METAL OXIDE	10	5%	1W F						
						C502	1-126-959-11		0.47μF	20%	50V
R1506		METAL OXIDE	220	5%	2W F	C504	1-102-116-00		680PF	10%	50V
R1507		METAL GLAZE	22K	5%	1/10W	C505	1-130-471-00	MYLAR	$0.001\mu F$	5%	50V
R1508	1-249-383-11		1.5	5%	1/4W F	C506	1-126-933-11		100μF	20%	16V
R1509	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	C507	1-126-965-11	ELECT	22μF	20%	50V
R1510	1-216-675-11	METAL CHIP	10K	0.50%	1/10W						
						C508	1-102-212-00		820PF	10%	500V
R1511	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	C509	1-106-383-00	MYLAR	$0.047 \mu F$	10%	200V
R1520	1-216-089-91	METAL GLAZE	47K	5%	1/10W	C510	1-102-002-00		680PF	10%	500V
R1522	1-216-089-91	METAL GLAZE	47K	5%	1/10W	C511	1-130-475-00	MYLAR	$0.0022 \mu F$	5%	50V
R1523	1-216-073-00	METAL GLAZE	10K	5%	1/10W	C512	1-136-479-11	FILM	$0.001 \mu F$	5%	50V
R1524	1-216-097-91	METAL GLAZE	100K	5%	1/10W						
						C513	1-126-965-11		22μF	20%	50V
R1525		METAL CHIP	30K		1/10W	<b>C</b> 514		CERAMIC			2KV
R1526		METAL CHIP	30K	0.50%	1/10W		△ 1-125-831-91		$0.033\mu F$	3%	630V
R1527	1-216-097-91	METAL GLAZE	100K	5%	1/10W	C516	△ 1-117-807-11	FILM	14500PF	3%	1.6KV
R1528	1-216-089-91	METAL GLAZE	47K	5%	1/10W	C518	1-130-495-00	MYLAR	$0.1\mu F$	5%	50V
R1529	1-216-025-91	METAL GLAZE	100	5%	1/10W						
						C519	1-136-287-11		$0.0047 \mu F$	5%	100V
R2106		METAL GLAZE	100	5%	1/10W	C520	1-162-116-00	CERAMIC	680PF	10%	2KV
R2109	1-216-041-00	METAL GLAZE	470	5%	1/10W	C521	1-162-116-00	CERAMIC	680PF	10%	2KV
R2110	1-216-073-00	METAL GLAZE	10K	5%	1/10W	C523	1-117-673-11	FILM	1.5µF	5%	200V
R2111	1-216-089-91	METAL GLAZE	47K	5%	1/10W	C524	1-136-287-11	FILM	0.0047μF	5%	100V
R2112	1-216-065-91	METAL GLAZE	4.7K	5%	1/10W				•		
						C526	1-102-228-00	CERAMIC	470PF	10%	500V
R2201	1-216-041-00	METAL GLAZE	470	5%	1/10W	C527	1-104-664-11	ELECT	47μF	20%	25V
R2202	1-216-041-00	METAL GLAZE	470	5%	1/10W	C528	1-107-649-11	ELECT	2.2μF	20%	250V
R2203		METAL GLAZE	100	5%	1/10W	C529	1-109-961-11		0.75µF	5%	200V
R2204		METAL GLAZE	680	5%	1/10W	C530	1-110-626-11		330µF	20%	160V
R2205		METAL GLAZE	470	5%	1/10W				•		



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C531	1-126-971-11	ELECT	470μF	20%	50V	C804	1-126-934-11	ELECT	220µF	20%	16V
C532	1-126-971-11		470μF	20%	50V	C805	1-126-934-11		220μF	20%	16V
C533	1-128-562-11		47μF	20%	100V	C806	1-126-934-11	ELECT	$220\mu F$	20%	16V
C535	1-106-387-00		0.068μF	5%	200V	C007	1 127 274 11	EH M	0.047	50/	5017
C536	1-137-374-11	FILM	0.0047μF	5%	50V	C807 C808	1-137-374-11 1-137-374-11		0.047μF 0.047μF	5% 5%	50V 50V
C537	1-104-665-11	ELECT	100µF	20%	25V	C809	1-137-374-11		0.047μΓ 0.047μF	5%	50V
C538	1-104-665-11		100μF	20%	25V	C810	1-137-374-11		0.047μF	5%	50V
C539	1-162-114-00		$0.0047 \mu F$		2KV	C811	1-137-366-11	FILM	$0.0022 \mu F$	5%	50V
C540	1-130-487-00		0.022μF	5%	50V	C010	1 126 160 00	EH M	0.22	50/	5017
C541	1-130-489-00	MYLAR	0.033µF	5%	50V	C812 C813	1-136-169-00 1-137-374-11		0.22μF 0.047μF	5% 5%	50V 50V
C542	1-104-666-11	ELECT	220µF	20%	25V	C815	1-137-374-11		470μF	20%	25V
C544	1-104-665-11		100μF	20%	25V	C816	1-126-964-11		10μF	20%	50V
C545	1-104-665-11	ELECT	100μF	20%	25V	C818	1-126-933-11	ELECT	100μF	20%	16V
C546	1-107-637-11		22μF	20%	160V						
C548	1-102-244-00	CERAMIC	220PF	10%	500V	C819	1-126-964-11		10μF	20%	50V
C550	1-126-935-11	EI ECT	470μF	20%	16V	C820 C821	1-102-114-00 1-130-495-00		470PF 0.1μF	10% 5%	50V 50V
C551	1-126-935-11		470μΓ 470μΓ	20%	16V	C823	1-101-880-00		47PF	5%	50V
C554	1-129-702-00		0.001µF	5%	630V	C825	1-104-665-11		100μF	20%	25V
C555	1-126-960-11		1μF	20%	50V						
C556	1-130-495-00	MYLAR	$0.1 \mu F$	5%	50V	C826	1-136-165-00		$0.1 \mu F$	5%	50V
						C827	1-126-960-11		1μF	20%	50V
C603	1-102-228-00		470PF	10%	500V	C828	1-137-366-11		0.0022μF	5%	50V
C604 C605	1-126-971-11 1-113-907-51		470μF 0.0022μF	20% 20%	50V 250V	C829 C830	1-126-959-11 1-136-356-11		0.47μF 470PF	20% 5%	50V 50V
C606	1-113-907-51		$0.0022 \mu F$	20%	250V 250V	C030	1-130-330-11	TILIVI	47011	370	30 <b>v</b>
C607		ELECT(BLOCK)	820µF	20%	200V	C831	1-126-960-11	ELECT	1µF	20%	50V
		, ,	·			C832	1-126-960-11	ELECT	i 1μF	20%	50V
C608		ELECT(BLOCK)	820µF	20%	200V	C833	1-126-960-11		1μF	20%	50V
C612	1-164-646-11		2200PF	10%	500V	C834	1-104-665-11		100μF	20%	25V
C615	1-136-173-00		0.47μF	5%	50V	C836	1-136-169-00	FILM	0.22μF	5%	50V
C616 C617	1-136-173-00 1-136-169-00		0.47μF 0.22μF	5% 5%	50V 50V	C837	1-126-963-11	FI FCT	4.7μF	20%	50V
C017	1-130-107-00	I ILWI	0.22μ1	370	30 V	C838	1-120-905-11		100μF	20%	25V
C618	1-136-169-00	FILM	0.22µF	5%	50V	C839	1-137-374-11		0.047µF	5%	50V
C621	1-129-719-00	FILM	$0.027\mu F$	5%	630V	C840	1-104-665-11	ELECT	100μF	20%	25V
C651	1-107-910-11		100μF	20%	35V	C841	1-137-374-11	FILM	$0.047\mu F$	5%	50V
C652	1-123-024-21		33μF	200/	160V	C0.40	1 127 274 11	EII M	0.047	50/	5017
C653	1-115-755-11	ELECT	180μF	20%	16V	C842 C843	1-137-374-11 1-104-665-11		0.047μF 100μF	5% 20%	50V 25V
C654	1-115-755-11	ELECT	180µF	20%	16V	C844	1-104-003-11		100μΓ 100μF	20%	16V
C655	1-126-943-11		2200µF	20%	25V	C845	1-126-933-11		100μF	20%	16V
C656	1-126-943-11	ELECT	2200µF	20%	25V	C846	1-126-933-11		100μF	20%	16V
C657	1-126-943-11		$2200\mu F$	20%	25V						
C658	1-128-550-11	ELECT	2200μF	20%	50V	C847	1-126-933-11		100μF	20%	16V
C659	1-102-074-00	CEDAMIC	0.001µF	10%	50V	C848 C851	1-126-933-11 1-137-374-11		100μF 0.047μF	20% 5%	16V 50V
C660	1-102-074-00		0.001μ1 100μF	20%	6.3V	C852	1-137-374-11		0.047μF 0.047μF	5%	50V
C661	1-102-074-00		0.001µF	10%	50V	C853	1-137-374-11		0.047μF	5%	50V
C662	1-104-664-11	ELECT	47μF	20%	25V				·		
C663	1-104-664-11	ELECT	47μF	20%	25V	C854	1-126-933-11		100μF	20%	16V
						C856	1-164-096-11		0.01µF		50V
C664	1-104-664-11		47μF	20%	25V 25V	C857 C858	1-126-933-11		100μF 470μF	20%	16V 25V
C665 C666	1-104-666-11 1-126-960-11		220μF 1μF	20% 20%	50V	C860	1-126-941-11 1-126-933-11		470μF 100μF	20% 20%	25 V 16 V
C667	1-120-900-11		47μF	20%	25V	C000	1-120-733-11	LLLCI	Ιοομι	2070	10 V
C668	1-126-933-11		100μF	20%	16V	C861	1-137-374-11	FILM	$0.047 \mu F$	5%	50V
						C862	1-137-374-11	FILM	$0.047 \mu F$	5%	50V
C671	1-126-935-11		470μF	20%	16V	C863	1-137-374-11		$0.047\mu F$	5%	50V
C673	1-164-644-11		330PF	10%	500V	C864	1-126-933-11		100μF	20%	16V
C675 C676	1-104-665-11 1-126-960-11		100μF 1μF	20% 20%	25V 50V	C865	1-130-471-00	IVI I LAK	0.001µF	5%	50V
C801	1-126-960-11		1μF 100μF	20%	25V	C866	1-136-177-00	FILM	1μF	5%	50V
2301	- 101 000 11		100pu	2070		C867	1-101-880-00		47PF	5%	50V
C802	1-104-665-11	ELECT	100μF	20%	25V	C868	1-101-880-00		47PF	5%	50V
C803	1-126-934-11	ELECT	220μF	20%	16V	C869	1-130-489-00	MYLAR	$0.033 \mu F$	5%	50V



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
C870	1-164-096-11	CEDAMIC	0.01uE		50V	D602 A	9 710 052 94	DIODE LN4SB60		
C870	1-104-090-11	CERAMIC	0.01µF		30 V	D602 ZE		DIODE LN4SB00 DIODE 11ES2		
C871	1-101-880-00	CERAMIC	47PF	5%	50V	D603		DIODE RD11ESB2	,	
C872	1-101-880-00		47PF	5%	50V	D605		DIODE MTZJ-T-77		
C873	1-101-880-00		47PF	5%	50V	D651		DIODE D1NL20-T		
C880	1-126-961-11		2.2μF	20%	50V					
C881	1-102-973-00		100PF	5%	50V	D652	8-719-991-33	DIODE 1SS133T-7	7	
						D653	8-719-510-02	DIODE D1NS4		
C882	1-102-973-00	CERAMIC	100PF	5%	50V	D654	8-719-022-97	DIODE D2S4MF		
C883	1-102-973-00	CERAMIC	100PF	5%	50V	D655	8-719-061-56	DIODE RBA-402L	LF-A	
C885	1-126-961-11	ELECT	$2.2\mu F$	20%	50V	D656	8-719-052-92	DIODE D10SBS4F	ĭ	
C886	1-102-973-00		100PF	5%	50V					
C887	1-102-973-00	CERAMIC	100PF	5%	50V	D657		DIODE D4SBS4-F		
G000	4 400 050 00	GED 11 HG	10000	==.	#0**	D658		DIODE D10SC4M		
C888	1-102-973-00		100PF	5%	50V	D660		DIODE 1SS133T-7	7	
C889	1-126-941-11		470μF	20%	25V	D661		DIODE 11ES2	7	
C897	1-126-941-11	ELECT	470μF	20%	25V	D662	8-/19-991-33	DIODE 1SS133T-7	/	
						D664	9 710 110 61	DIODE RD24ESB1	ı	
		<connector></connector>				D669		DIODE RD24E3B1		
		CONNECTOR				D670		DIODE MTZJ-T-77		
CN501	1-564-513-11	PLUG, CONNECT	OR 10P			D691		DIODE 11ES2	15	
		PIN, CONNECTOR		RD) 4F	)	D692		DIODE 11ES2		
		PIN, CONNECTOR				20,2	0 717 200 02	DIODE IIEGE		
		PIN, CONNECTOR	,	,		D801	8-719-110-17	DIODE RD10ESB2	2	
		PIN, CONNECTOR				D802		DIODE RD10ESB2		
						D803	8-719-110-17	DIODE RD10ESB2	2	
CN506 *	1-774-182-11	CONNECTOR, BO	ARD TO B	OARD	10P	D804		DIODE RD10ESB2		
CN507 *	1-564-507-11	PLUG, CONNECT	OR 4P			D809	8-719-991-33	DIODE 1SS133T-7	7	
CN601 *	1-580-689-11	PIN, CONNECTOR	R (PC BOA	RD) 4F	)					
		TAB (CONTACT)				D810	8-719-991-33	DIODE 1SS133T-7	7	
CN651 *	1-774-182-11	CONNECTOR, BO	ARD TO B	OARD	10P	D820		DIODE RD3.6ESB		
						D828		DIODE RD5.6ESB		
		CONNECTOR, BO				D829		DIODE RD5.1ESB		
		PIN, CONNECTOR		RD) 3F	)	D835	8-719-109-89	DIODE RD5.6ESB	2	
		PLUG, CONNECT				D040	0.710.001.22	DIODE 100122T	7	
		PLUG, CONNECTOR PLUG, CONNECTO				D840		DIODE 1SS133T-7		
CN605 "	1-304-307-11	PLUG, CONNECT	OK 4P			D842 D845		DIODE 1SS133T-7		
CN804 *	1_774_182_11	CONNECTOR, BO	ARD TO B	CARE	10P	D845 D846		DIODE 1SS133T-7		
		PIN, CONNECTOR				D847		DIODE MTZJ-30A		
		,	- (	/						
						D848	8-719-923-86	DIODE MTZJ-T-77	7-15	
		<diode></diode>				D849	8-719-110-22	DIODE RD11ESB2	2	
						D850	8-719-109-89	DIODE RD5.6ESB	2	
D501		DIODE 1SS133T-7				D852		DIODE MTZJ-T-77		
D502		DIODE 1SS133T-7				D853	8-719-982-19	DIODE MTZJ-30A		
D503		DIODE RGP02-201				D054	0.710.002.10	DIODE MEZI 20 A		
D504		DIODE EL 17	•			D854		DIODE MTZI 30A		
D507	0-717-302-43	DIODE EL1Z				D855 D857		DIODE MTZJ-30A DIODE MTZJ-30A		
D508	8-719-900-26	DIODE ERD29-08J	ſ			D857		DIODE MTZJ-30A		
D509		DIODE ERC06-158				_ 555				
D510		DIODE ERC06-158								
D511	8-719-302-43	DIODE EL1Z						<ferrite bead=""></ferrite>	>	
D513	8-719-302-43	DIODE EL1Z								
						FB501	1-410-397-21	FERRITE	1.1μΗ	
D514		DIODE GP08D				FB651	1-410-396-41		0.45μΗ	
D515		DIODE GP08D				FB652	1-410-396-41		0.45μΗ	
D517		DIODE RGP02-20H				FB653	1-410-396-41		0.45μΗ	
D519		DIODE ISS133T-7	/			FB654	1-410-397-21	FERRITE	1.1μΗ	
D520	8-719-302-43	DIODE EL1Z				ED 455	1 410 206 41	EEDDITE	0.45014	
D521	8 710 202 42	DIODE EL1Z				FB655	1-410-396-41		0.45μH 0.45μH	
D521 D524		DIODE ELIZ DIODE 1SS133T-7	7			FB656 FB657	1-410-396-41 1-410-396-41		0.45μH 0.45μH	
D524 D527		DIODE ISS1331-7 DIODE RD5.1ESB				FD03/	1-410-390-41	PERMITE	0.45μΠ	
D527 D528		DIODE MTZJ-T-77								
D601		DIODE 11ES2								
_ 001	200 02									

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in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.



		og.	, acca.								
REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION			REMAR	K
ED CCO	1 410 761 11	FEDDITE	011		0.507	0.720.022.61	TD A MOLOTOD AGO	15022.02			
FB660	1-412-761-11		0μΗ		Q507		TRANSISTOR 2SC				
FB661	1-412-761-11	FERRITE	0μΗ		Q601		TRANSISTOR 2SA				
					Q602 Q651		TRANSISTOR 2SD TRANSISTOR 2SA				
		<ic></ic>			Q031	6-729-119-70	TRANSISTOR 2SF	111/3-ПГЕ			
		(IC)			Q652	8-729-119-78	TRANSISTOR 2SC	2785_HFF			
IC501	8-759-133-90	IC UPC339C			Q653		TRANSISTOR 2SC				
		TRANSISTOR MX	K0841AB-F		Q654		TRANSISTOR 2SA				
IC651 △	8-749-012-13	IC DM-58			Q655		TRANSISTOR 2SA				
IC652	8-759-012-67	IC MC7905CT			Q656	8-729-119-78	TRANSISTOR 2SC	2785-HFE			
IC653	8-759-231-53	IC TA7805S									
					Q657		TRANSISTOR 2SA				
	8-759-231-53				Q658		TRANSISTOR 2SC				
	8-759-327-51				Q659		TRANSISTOR 2SA				
IC802	8-759-327-51				Q660		TRANSISTOR 2SC				
		IC CA0007AD			Q661	8-729-119-78	TRANSISTOR 2SC	2/85-HFE			
IC804	8-759-464-79	IC PM0011AS			0662	9 720 110 79	TRANSISTOR 2SC	2705 HEE			
IC805	9 750 711 29	IC NJM2058D			Q662 Q802		TRANSISTOR 2SA				
		IC PM0011AS			Q802 Q803		TRANSISTOR 2SA				
		IC PM0011AS			Q803 Q804		TRANSISTOR 2SA				
		IC STK392-150			Q805		TRANSISTOR 2SC				
		IC STK392-150			2002	0 727 117 70	110 11 1010 1 010 250	2703 111 2			
					Q809	8-729-119-78	TRANSISTOR 2SC	2785-HFE			
IC811	8-759-634-51	IC M5218AP			Q810	8-729-119-78	TRANSISTOR 2SC	2785-HFE			
		<coil></coil>					<resistor></resistor>				
L502	1-410-478-11	INDLICTOR	47μΗ		R501	1-249-421-11	CADDON	2.2K	5%	1/4W	
	1-459-111-00		0μΗ		R502		METAL OXIDE	2.2K 47K	5%	1/4 W	7
	1-412-552-11		2.2mmH		R502	1-247-843-11		3.3K	5%	1/4W	
	1-412-533-21		47μH		R503	1-249-419-11		1.5K	5%	1/4W	
	1-414-158-11		2.2μΗ		R505	1-247-895-91		470K	5%	1/4W	
L652	1-414-158-11	INDUCTOR	2.2μΗ		R506	1-249-429-11	CARBON	10K	5%	1/4W	
L653	1-414-158-11	INDUCTOR	2.2μΗ		R507	1-249-422-11		2.7K	5%	1/4W	
L654	1-414-158-11	INDUCTOR	2.2μΗ		R508	1-260-337-11	CARBON	5.6K	5%	1/2W	
	1-412-523-11		6.8µH		R509	1-249-437-11	CARBON	47K	5%	1/4W	
L801	1-406-975-21	INDUCTOR	0μΗ		R510	1-215-919-11	METAL OXIDE	2.2K	5%	3W I	7
1 000	1 406 075 21	INDLICTOR	011		D.511	1 215 010 11	METAL OVIDE	0.017	50/	2337 - 1	_
L802	1-406-975-21	INDUCTOR	0μΗ		R511		METAL OXIDE	2.2K	5%	3W F	
					R512		METAL OXIDE	1.8K	5%	3W F	7
		<neon lamp=""></neon>			R513	1-249-424-11	METAL	3.9K	5%	1/4W 1/4W	
		CNEON LAWIF>		'	₹R514 <u>/</u> R516	1-215-443-00		8.2K	1%	1/4 W	
NL501	1-519-108-99	LAMP, NEON			10	1 213 443 00	WIE IT IE	0.210	1 /0	1/4**	
NL502		LAMP, NEON			R517	1-215-449-00	METAL	15K	1%	1/4W	
NL503		LAMP, NEON			R518	1-215-456-00		30K	1%	1/4W	
NL504	1-519-108-99	LAMP, NEON			R519	1-247-863-91		22K	5%	1/4W	
NL505	1-519-108-99	LAMP, NEON			R522	1-249-428-11	CARBON	8.2K	5%	1/4W	
					R523	1-249-437-11	CARBON	47K	5%	1/4W	
		<ic link=""></ic>			R524	1-247-863-91		22K	5%	1/4W	_
DG (01 A	1 500 505 01	I DIE IG			R525	1-249-405-11		100	5%	1/4W I	
	1-533-597-31				R528		METAL OXIDE	68	5%	3W F	4
PS602 🗥	1-533-597-31	LINK, IC			R530	1-249-437-11		47K	5%	1/4W	,
					R531	1-213-000-00	METAL OXIDE	680	5%	1W F	
		<transistor></transistor>			R532	1-260-314-11	CARBON	68	5%	1/2W	
					R533	1-214-912-00		91K	1%	1/2W	
Q501	8-729-119-80	TRANSISTOR 2SC	2688-LK		R534	1-215-479-00		270K	1%	1/4W	
Q502	8-729-024-05	TRANSISTOR 2SE	2348(LBSONY-1	)	R535	1-247-887-00		220K	5%	1/4W	
Q503	8-729-119-76	TRANSISTOR 2SA	1175-HFE		R536	1-260-288-11		0.47	5%	1/2W	
Q504		TRANSISTOR 2SC									
Q505	8-729-931-45	TRANSISTOR IRF	614		R537	1-260-336-11		4.7K	5%	1/2W	
0.50	0.505 11: -:		1000		R538	1-247-863-91		22K	5%	1/4W	_
Q506	8-729-119-78	TRANSISTOR 2SC	22785-HFE		R539	1-249-377-11	CARBON	0.47	5%	1/4W F	÷.



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The componants identified by shading and mark ≜ are critical for safety.
Replace only with part number specified.

			OH	Jirially used	1.							
REF. NO.	PART NO.	DESCRIPTION			REMA	ARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R540	1-249-379-11	CARBON	0.68	5%	1/4W	F	R615	1-249-425-11	CARBON	4.7K	5%	1/4W
R541	1-260-087-11	CARBON	100	5%	1/2W	, l	R616	1-249-421-11	CARBON	2.2K	5%	1/4W
							R617	1-249-421-11	CARBON	2.2K	5%	1/4W
R542	1-215-862-11	METAL OXIDE	68	5%	1W	F	R618	1-249-389-11	CARBON	4.7	5%	1/4W F
				(KP-41T65	C/61S	65C)	R651	1-249-429-11		10K	5%	1/4W
R542	1-215-864-00	METAL OXIDE	150	5%	1W	_ / I						
					P-53S		R653	1-249-377-11	CARBON	0.47	5%	1/4W F
R543	1-216-349-00	METAL OXIDE	1	5%	1W		R655	1-247-887-00		220K	5%	1/4W
10 15	1 210 317 00	WEITE OTHER	•	570	1 "	1	R656	1-260-288-11		0.47	5%	1/2W
R544	1 215 862 11	METAL OXIDE	68	5%	1W	E	R657	1-249-429-11		10K	5%	1/4W
K344	1-213-002-11	METAL OXIDE	00	(KP-41T65			R658	1-249-429-11		1K	5%	1/4W
R544	1 215 964 00	METAL OXIDE	150	5%	1W	_ / I	K036	1-249-417-11	CARBON	1K	370	1/4 VV
K344	1-213-804-00	METAL OAIDE	130		1 w P-53S		D.C.CO	1 240 412 11	CADDON	470	£0/	1 /4337
D 5 4 5	1 240 277 11	CARRON	0.47			´ I	R660	1-249-413-11		470	5%	1/4W
R545	1-249-377-11	CARBON	0.47	5%	1/4W	F	R661	1-249-417-11		1K	5%	1/4W F
							R662	1-249-425-11		4.7K	5%	1/4W
R546	1-249-377-11		0.47	5%	1/4W		R664	1-249-425-11		4.7K	5%	1/4W
R547	1-247-807-31		100	5%	1/4W		R665	1-247-807-31	CARBON	100	5%	1/4W
R548	1-249-413-11		470	5%	1/4W							
R549	1-247-863-91	CARBON	22K	5%	1/4W	'	R667	1-249-417-11	CARBON	1K	5%	1/4W
R550	1-247-807-31	CARBON	100	5%	1/4W	<i>'</i>	R668	1-249-377-11	CARBON	0.47	5%	1/4W F
							R669	1-249-429-11	CARBON	10K	5%	1/4W
R551	1-249-437-11	CARBON	47K	5%	1/4W	, I	R672	1-249-421-11	CARBON	2.2K	5%	1/4W
R552	1-247-807-31	CARBON	100	5%	1/4W	, I	R673	1-249-413-11	CARBON	470	5%	1/4W
R553	1-247-881-00	CARBON	120K	5%	1/4W	, I						
R554	1-249-405-11	CARBON	100	5%	1/4W	F	R675	1-215-417-00	METAL	680	1%	1/4W
R556	1-260-123-11	CARBON	100K	5%	1/2W	,	R676	1-216-369-00	METAL OXIDE	1	5%	2W F
							R677	1-247-807-31	CARBON	100	5%	1/4W
R557	1-216-490-11	METAL OXIDE	39K	5%	3W	F	R679	1-249-421-11		2.2K	5%	1/4W
R558		METAL OXIDE	39K	5%	3W		R680	1-249-417-11		1K	5%	1/4W
R559		METAL OXIDE	39K	5%	3W		Rooo	1 247 417 11	CHRIDOIN	110	370	1/4***
R560	1-215-399-00		120	1%	1/4W		R681	1-249-417-11	CARRON	1K	5%	1/4W
		METAL	120	1 70	1/4W		R682	1-249-417-11		1K	5%	1/4W
<b>R</b> 561 △	7	METAL			1/4 VV		R683	1-249-417-11		1K		1/4 w 1/4W
D.5.62	1 240 420 11	CARRON	1077	50/	1 / 433	,					5%	
R563	1-249-429-11		10K	5%	1/4W		R684	1-249-417-11		1K	5%	1/4W
R564	1-260-131-11		470K		1/2W		R686	1-215-421-00	METAL	1K	1%	1/4W
R565	1-260-087-11		100	5%	1/2W							
R566	1-249-377-11		0.47	5%	1/4W		R687	1-215-441-00		6.8K	1%	1/4W
R567	1-249-377-11	CARBON	0.47	5%	1/4W	' F	R688	1-215-481-00		330K	1%	1/4W
							R689	1-249-425-11	CARBON	4.7K	5%	1/4W
R568	1-247-903-00	CARBON	1M	5%	1/4W	<i>'</i>	R690	1-249-417-11	CARBON	1K	5%	1/4W
R569	1-216-392-11	METAL OXIDE	1.8	5%	3W	F	R692	1-249-425-11	CARBON	4.7K	5%	1/4W
R570	1-215-910-00	METAL OXIDE	68	5%	3W	F						
R571	1-249-422-11	CARBON	2.7K	5%	1/4W	, I	R693	1-249-429-11	CARBON	10K	5%	1/4W
R572	1-247-895-91	CARBON	470K	5%	1/4W	, I	R695	1-247-807-31	CARBON	100	5%	1/4W
							R696	1-249-417-11	CARBON	1K	5%	1/4W
R573	1-249-430-11	CARBON	12K	5%	1/4W	,	R697	1-249-417-11	CARBON	1K	5%	1/4W
R574	1-249-429-11		10K	5%	1/4W		R801	1-249-437-11		47K	5%	1/4W
R577	1-249-422-11	CARBON	2.7K	5%	1/4W	,						
R579	1-247-895-91		470K		1/4W		R803	1-249-430-11	CARBON	12K	5%	1/4W
R580	1-247-863-91		22K	5%	1/4W		R804	1-249-429-11		10K	5%	1/4W
							R805	1-247-807-31		100	5%	1/4W
R581	1-249-428-11	CARBON	8.2K	5%	1/4W	,	R806	1-249-429-11		10K	5%	1/4W
R583	1-249-428-11		8.2K	5%	1/4W		R807	1-247-807-31		100	5%	1/4W
R584	1-247-887-00		220K		1/4W		1007	1-247-007-31	CARDON	100	570	1/4**
R585		METAL OXIDE	39K	5%	3W		R808	1-249-429-11	CADDON	10K	5%	1/4W
R586	1-260-292-11	CARDUN	1	5%	1/2W		R809	1-249-425-11		4.7K	5%	1/4W
D.500	1 247 962 01	CADDON	2277	-a	1 /4**	,	R810	1-247-807-31		100	5%	1/4W
R588	1-247-863-91		22K	5%	1/4W		R811	1-247-807-31		100	5%	1/4W
R589	1-247-887-00		220K		1/4W		R812	1-249-429-11	CARBON	10K	5%	1/4W
R591		METAL OXIDE	1K	5%	3W							
	1-202-933-61		0.1	10%	1/2W		R813	1-249-429-11		10K	5%	1/4W
R609	1-247-887-00	CARBON	220K	5%	1/4W	'	R814	1-247-807-31		100	5%	1/4W
							R815	1-247-807-31	CARBON	100	5%	1/4W
R610	1-247-887-00	CARBON	220K	5%	1/4W	,	R816	1-247-807-31	CARBON	100	5%	1/4W
R611	1-216-353-00	METAL OXIDE	2.2	5%	1W	F	R817	1-247-807-31	CARBON	100	5%	1/4W
R612	1-247-887-00	CARBON	220K	5%	1/4W	,						
R613	1-216-353-00	METAL OXIDE	2.2	5%	1W	F	R818	1-249-430-11	CARBON	12K	5%	1/4W
R614	1-247-887-00	CARBON	220K	5%	1/4W	,	R820	1-249-429-11	CARBON	10K	5%	1/4W



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R821 R822	1-249-428-11 1-249-417-11		8.2K 1K	5% 5%	1/4W 1/4W	R888	1-247-807-31	CARBON	100	5%	1/4W
R823	1-249-417-11		1K	5%	1/4W 1/4W	R889	1-249-438-11	CARRON	56K	5%	1/4W
K023	1-249-417-11	CARDON	1 IX	370	1/ <b>4 VV</b>	R890	1-249-441-11		100K	5%	1/4W
R824	1-215-462-00	METAI	51K	1%	1/4W	R891	1-249-429-11		10K	5%	1/4W
R825	1-249-441-11		100K	5%	1/4W	R892	1-215-445-00		10K	1%	1/4W
R826	1-215-462-00		51K	1%	1/4W	R895	1-249-421-11		2.2K	5%	1/4W
R827	1-249-417-11		1K	5%	1/4W	1073	1 247 421 11	CHILDOIN	2.21	570	1/4**
R828	1-249-426-11		5.6K	5%	1/4W	R896	1-249-441-11	CARBON	100K	5%	1/4W
				- / -	-,	R897	1-247-807-31		100	5%	1/4W
R829	1-249-426-11	CARBON	5.6K	5%	1/4W	R898	1-247-815-91		220	5%	1/4W
R830	1-249-414-11		560	5%	1/4W	R899	1-247-815-91		220	5%	1/4W
R831	1-249-414-11		560	5%	1/4W	R901	1-249-430-11		12K	5%	1/4W
R832	1-249-441-11	CARBON	100K	5%	1/4W						
R833	1-249-417-11	CARBON	1K	5%	1/4W	R902	1-249-438-11	CARBON	56K	5%	1/4W
						R903	1-215-421-00	METAL	1K	1%	1/4W
R834	1-249-441-11	CARBON	100K	5%	1/4W	R904	1-214-800-11	METAL	2.2	1%	1/2W
R835	1-249-441-11	CARBON	100K	5%	1/4W	R905	1-214-800-11	METAL	2.2	1%	1/2W
R836	1-247-807-31	CARBON	100	5%	1/4W	R906	1-214-800-11	METAL	2.2	1%	1/2W
R837	1-249-441-11	CARBON	100K	5%	1/4W						
R838	1-249-421-11	CARBON	2.2K	5%	1/4W	R907	1-247-815-91	CARBON	220	5%	1/4W
						R908	1-247-815-91	CARBON	220	5%	1/4W
R841	1-247-815-91		220	5%	1/4W	R909	1-215-421-00	METAL	1K	1%	1/4W
R842	1-247-807-31	CARBON	100	5%	1/4W	R910	1-215-421-00	METAL	1K	1%	1/4W
R843	1-247-807-31		100	5%	1/4W	R911	1-215-455-00	METAL	27K	1%	1/4W
R844	1-247-807-31		100	5%	1/4W						
R845	1-249-441-11	CARBON	100K	5%	1/4W	R912	1-215-469-00		100K	1%	1/4W
						R913	1-215-455-00		27K	1%	1/4W
R846	1-247-807-31		100	5%	1/4W	R914	1-215-455-00		27K	1%	1/4W
R847	1-215-469-00		100K	1%	1/4W	R915	1-215-455-00		27K	1%	1/4W
R850	1-215-469-00		100K	1%	1/4W	R916	1-215-455-00	METAL	27K	1%	1/4W
R851	1-247-807-31		100	5%	1/4W	D017	1 215 455 00	METAL	2717	10/	1 / 4337
R852	1-247-807-31	CARBON	100	5%	1/4W	R917	1-215-455-00		27K	1%	1/4W
D052	1 2 17 007 00	CARRON	22077	50/	1 /4337	R918	1-215-455-00		27K	1%	1/4W
R853	1-247-887-00		220K	5%	1/4W	R919	1-249-435-11		33K	5%	1/4W
R854	1-249-429-11		10K	5%	1/4W	R920	1-214-800-11		2.2	1%	1/2W
R855	1-247-815-91		220	5%	1/4W	R921	1-249-431-11	CARBON	15K	5%	1/4W
R856 R857	1-247-807-31 1-247-807-31		100 100	5%	1/4W 1/4W	D022	1-215-445-00	METAI	101/	1%	1/4W
Ko3/	1-24/-60/-31	CARDON	100	5%	1/4 W	R922 R923	1-249-425-11		10K 4.7K	1% 5%	1/4 W 1/4W
R858	1-215-455-00	METAI	27K	1%	1/4W	R923 R924	1-249-423-11		4.7K 9.1K	1%	1/4W
R859	1-215-455-00		27K	1%	1/4W	R925	1-249-425-11		4.7K	5%	1/4W
R860	1-215-455-00		27K	1%	1/4W	R926	1-249-408-11		180	5%	1/4W
R861	1-215-455-00		27K	1%	1/4W	1020	1 2 17 100 11	Critabort	100	570	17 1 11
R862	1-215-455-00		27K	1%	1/4W	R927	1-215-445-00	METAL	10K	1%	1/4W
						R928	1-215-445-00		10K	1%	1/4W
R863	1-215-455-00	METAL	27K	1%	1/4W	R929	1-214-800-11		2.2	1%	1/2W
R865	1-249-424-11	CARBON	3.9K	5%	1/4W	R930	1-214-800-11	METAL	2.2	1%	1/2W
R867	1-215-461-00	METAL	47K	1%	1/4W	R931	1-215-445-00	METAL	10K	1%	1/4W
R868	1-215-445-00	METAL	10K	1%	1/4W						
R869	1-249-425-11	CARBON	4.7K	5%	1/4W	R933	1-215-453-00	METAL	22K	1%	1/4W
						R934	1-249-429-11		10K	5%	1/4W
R871	1-249-417-11		1K	5%	1/4W	R935	1-249-429-11	CARBON	10K	5%	1/4W
R872	1-249-425-11	CARBON	4.7K	5%	1/4W	R936	1-249-429-11		10K	5%	1/4W
R873	1-247-807-31	CARBON	100	5%	1/4W	R937	1-249-435-11	CARBON	33K	5%	1/4W
R874	1-249-429-11		10K	5%	1/4W						
R875	1-249-441-11	CARBON	100K	5%	1/4W	R938	1-215-421-00		1K	1%	1/4W
						R940	1-249-441-11		100K	5%	1/4W
R876	1-215-451-00		18K	1%	1/4W	R941	1-249-441-11		100K	5%	1/4W
R879	1-215-444-00		9.1K	1%	1/4W	R942	1-249-421-11		2.2K	5%	1/4W
R881	1-249-408-11		180	5%	1/4W	R943	1-249-441-11	CARBON	100K	5%	1/4W
R882	1-215-445-00		10K	1%	1/4W	D044	1 015 401 65	METAL	177	101	1 /4337
R883	1-215-445-00	MEIAL	10K	1%	1/4W	R944	1-215-421-00		1K	1%	1/4W
D004	1 215 445 00	METAI	1017	10/	1 /4337	R945	1-249-429-11		10K	5%	1/4W
R884	1-215-445-00		10K	1%	1/4W	R946	1-215-421-00		1K	1%	1/4W
R885	1-249-441-11		100K	5% 5%	1/4W	R947	1-249-441-11		100K	5%	1/4W
R886	1-249-428-11		8.2K	5% 5%	1/4W	R948	1-247-815-91	CAKBON	220	5%	1/4W
R887	1-247-807-31	CARBUN	100	5%	1/4W						



The componants identified by shading and mark △ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO	0.	PART NO.	DESCRIPTION			REMARK
R949	1-247-807-31		100	5%	1/4W				<transformer< td=""><td>l&gt;</td><td></td><td></td></transformer<>	l>		
R950 R951	1-247-807-31 1-247-807-31		100 100	5% 5%	1/4W 1/4W	T501	A	1 /27 105 11	TRANSFORMER.	HODIZON	NTAI I	DIVE
R951 R952	1-247-807-31		100	5%	1/4W 1/4W				TRANSFORMER,			
R953	1-247-863-91		22K	5%	1/4W				TRANSFORMER,			
						T504	<u> </u>	1-453-238-11	TRANSFORMER	ASSY, FLY	BACK	
R954	1-215-433-00		3.3K	1%	1/4W				(NX-4007//X	4A4))(KP-5	53S65C	C/61S65C)
R955	1-215-433-00		3.3K	1%	1/4W							
R956	1-249-429-11		10K	5%	1/4W	T504	<u> </u>	1-453-248-11	TRANSFORMER	,		
R957	1-214-800-11		2.2	1%	1/2W					-4007//X4T	(4))(KP	-41T65C)
R958	1-214-800-11	METAL	2.2	1%	1/2W				TRANSFORMER, TRANSFORMER,		TFR (P	PRT)
R959	1-215-433-00	METAL	3.3K	1%	1/4W				TRANSFORMER,			
R960	1-215-451-00		18K	1%	1/4W						(-	/
R961	1-249-425-11		4.7K	5%	1/4W							
R962	1-214-800-11		2.2	1%	1/2W				<thermistor></thermistor>			
R963	1-214-800-11		2.2	1%	1/2W				(THERWINGTOR)			
1000	1 214 000 11	METAL	2.2	1 /0	1/2 **	TH801		1-808-269-11	THERMISTOR			
R964	1-215-433-00	METAI	3.3K	1%	1/4W	111001		1 000 207 11	THERMOTOR			
R965	1-215-433-00		3.3K	1%	1/4W							
R966	1-247-815-91		220	5%	1/4W							
R967	1-247-813-91		27K	1%	1/4W 1/4W	26 26 26 26 26 26 26	e ale ale ale :	ole	***********	de sile sile sile sile sile sile sile sil	e ale ale ale ale ale ale	e ple ple ple ple ple ple ple ple ple
						7, 7, 7, 7, 7, 7,		24. 24. 24. 24. 24. 24. 24. 24. 24. 24.	21. 21. 21. 21. 21. 21. 21. 21. 21. 21.	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
R968	1-215-455-00	METAL	27K	1%	1/4W		*	A 1221 777 A	CD DO ADD COM	DI PEP		
D060	1 215 455 00	METAL	2777	10/	1 / 4337		Φ.	A-1331-///-A	CR BOARD, COM			
R969	1-215-455-00		27K	1%	1/4W				*****	*****		
R970	1-215-455-00		27K	1%	1/4W							
R971	1-215-455-00		27K	1%	1/4W							
R972	1-215-455-00		27K	1%	1/4W							
R973	1-214-800-11	METAL	2.2	1%	1/2W				<capacitor></capacitor>			
R974	1-215-463-00	METAL	56K	1%	1/4W	C702		1-102-959-00	CERAMIC	22PF	5%	50V
R975	1-214-800-11		2.2	1%	1/2W	C703		1-104-664-11	ELECT	47μF	20%	25V
R976	1-215-433-00	METAL	3.3K	1%	1/4W	C704		1-126-964-11	ELECT	10μF	20%	50V
R977	1-247-815-91	CARBON	220	5%	1/4W	C705		1-161-754-00	CERAMIC	$0.001 \mu F$	10%	2KV
R978	1-215-445-00	METAL	10K	1%	1/4W	C706		1-126-934-11	ELECT	$220\mu F$	20%	16V
R979	1-249-425-11	CARBON	4.7K	5%	1/4W	C707		1-107-504-11	CERAMIC	10PF	0.5PF	500V
R980	1-247-815-91	CARBON	220	5%	1/4W	C708		1-102-050-00	CERAMIC	0.01µF	99%	500V
R981	1-247-815-91	CARBON	220	5%	1/4W	C709		1-162-115-00	CERAMIC	330PF	10%	2KV
R982	1-247-895-91	CARBON	470K	5%	1/4W	C712		1-107-662-11		22μF	20%	250V
R983	1-247-815-91	CARBON	220	5%	1/4W							
R984	1-215-444-00	METAI	9.1K	1%	1/4W				<connector></connector>			
R985	1-215-445-00		10K	1%	1/4W				CONTILLETOR			
R986	1-215-451-00		18K	1%	1/4W	CN701		1_605_015_11	TAB (CONTACT)			
R987	1-249-408-11		180	5%	1/4W				PLUG, CONNECT	OR 7P		
R988	1-215-445-00		10K	1%	1/4W				PLUG, CONNECT			
10,00	1 213 113 00	111111111111111111111111111111111111111	1011	170	1/111				PIN, CONNECTOR		TCH) 1	Р
R989	1-249-425-11	CARBON	4.7K	5%	1/4W				SOCKET, CRT	(	, 1	
R990	1-249-429-11		10K	5%	1/4W	011703						
R991	1-249-429-11		10K	5%	1/4W	CN706	· *	1-564-512-11	PLUG, CONNECT	OR 9P		
R993	1-249-425-11		4.7K	5%	1/4W	C11700	,	1 30 1 312 11	TECO, CONTECT	01()1		
R994	1-249-425-11		4.7K	5%	1/4W							
	,			- / -	2, 1				<diode></diode>			
R995	1-249-413-11		470	5%	1/4W							
R996	1-247-815-91		220	5%	1/4W	D701			DIODE 1SS133T-7			
R997	1-215-445-00		10K	1%	1/4W	D702			DIODE 1SS133T-7			
R998	1-249-434-11		27K	5%	1/4W	D703			DIODE 1SS133T-7			
R999	1-249-434-11	CARBON	27K	5%	1/4W	D704			DIODE 1SS133T-7			
						D705		8-719-923-86	DIODE MTZJ-T-77	7-15		
		<relay></relay>				D706		8-719-923-86	DIODE MTZJ-T-77	7-15		
						D708		8-719-110-17	DIODE RD10ESB2	2		
RY601 △	1-755-018-11	RELAY				D709		8-719-109-88	DIODE RD5.6ESB	1		
						D710		8-719-991-33	DIODE 1SS133T-7	7		

KP-41T65C/53S65C/61S65C RM-Y136A RM-Y136A RM-Y136A

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
		<ic></ic>				CN732 ³	* 1-564-510-11	PLUG, CONNECT	OR 7P		
IC701	8_750_ <i>/</i> (3 <i>/</i> )_30	IC TDA6106Q				CN733 ;	* 1-564-507-11	PLUG, CONNECTO PIN, CONNECTO	OR 4P	TCH) 1	р
10701	0-137-434-37	ic ibholoog						SOCKET, CRT	K (SIVIIVI I I	1011) 1	1
		<coil></coil>						PLUG, CONNECT			
L701	1-410-682-31	INDUCTOR	470µH			CN737 *	* 1-564-512-11	PLUG, CONNECT	OR 9P		
			,					<diode></diode>			
		<transistor></transistor>				D#21	0.710.001.22		7		
Q701	8-729-119-76	TRANSISTOR 2SA	A1175-HFE			D731 D732		DIODE 1SS133T-7 DIODE 1SS133T-7			
Q702	8-729-119-76	TRANSISTOR 2SA	A1175-HFE			D733	8-719-110-17	DIODE RD10ESB	2		
		<resistor></resistor>						<ic></ic>			
R701	1-219-743-11		100	50/	1/2337	IC721	9 750 424 20	IC TDA61060			
R702	1-215-425-00	METAL	100 1.5K	5% 1%	1/2W 1/4W	IC731	8-739-434-39	IC IDA0100Q			
R703 R704	1-215-437-00 1-260-132-11		4.7K 560K	1% 5%	1/4W 1/2W			<coil></coil>			
R705	1-215-424-00	METAL	1.3K	1%	1/4W	L731	1-410-682-31	INDUCTOR	470μΗ		
R706	1-215-437-00		4.7K	1%	1/4W	2731	1 110 002 31	INDOCTOR	170		
R707 R708	1-249-435-11 1-215-428-00		33K 2K	5% 1%	1/4W 1/4W			<resistor></resistor>			
R709 R710	1-260-101-11 1-215-903-11	CARBON METAL OXIDE	1.5K 68K	5% 5%	1/2W 2W F	R731	1-219-743-11	CARBON	100	5%	1/2W
R711	1-249-435-11		33K	5%	1/4W	R732 R733	1-260-132-11	CARBON	560K 1K	5%	1/2W
R711	1-249-435-11		100	5% 5%	1/4 W 1/4W	R735	1-215-421-00 1-249-441-11		100K	1% 5%	1/4W 1/4W
R713	1-249-437-11		47K	5%	1/4W	R736	1-215-430-00		2.4K	1%	1/4W
R714	1-260-099-11		1K	5%	1/2W	200		G. P.P.O.Y		<b>~</b> ~.	4 /0777
R715	1-260-133-11	CARBON	680K	5%	1/2W	R737 R738	1-260-101-11	CARBON METAL OXIDE	1.5K 68K	5% 5%	1/2W 2W F
R717	1-249-417-11	CARBON	1K	5%	1/4W	R739	1-260-133-11		680K	5%	1/2W
R718	1-247-807-31		100	5%	1/4W	R740	1-260-099-11		1K	5%	1/2W
R719	1-260-087-11	CARBON	100	5%	1/2W	R741	1-215-435-00	METAL	3.9K	1%	1/4W
		CDADY CAD				R742	1-247-885-00		180K	5%	1/4W
		<spark gap=""></spark>				R743	1-247-807-31	CARDON	100	5%	1/4W
SG701 SG702		GAP, SPARK GAP, SPARK						<spark gap=""></spark>			
						SG731	1-519-422-11	GAP, SPARK			
****	***	******	***	***	<b></b>	SG732		GAP, SPARK			
****	******	* * * * * * * * * * * * * * * * * * *	*****	****	~~~~~~~~						
	* A-1331-778-A	CG BOARD, COM				******	*****	******	******	*****	**
						,	k A 1221 770 A	CB BOARD, COM	DI ETE		
							A-1331-119-A	*********			
		<capacitor></capacitor>									
C732 C733	1-102-963-00 1-161-754-00		33PF 0.001μF	5% 10%	50V 2KV			<capacitor></capacitor>			
C735	1-102-050-00		0.001μF	99%	500V			(CHITICHOIC)			
C736	1-162-115-00		330PF	10%	2KV	C762	1-102-963-00		33PF	5%	50V
C737	1-107-662-11	ELECT	22μF	20%	250V	C763 C765	1-161-754-00 1-102-050-00		0.001μF 0.01μF	10% 99%	2KV 500V
						C766	1-162-115-00	CERAMIC	330PF	10%	2KV
		<connector></connector>				C767	1-107-662-11	ELECT	22μF	20%	250V
CN731	1-695-915-11	TAB (CONTACT)									



The componants identified by shading and mark ≜ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK_	REF. NO.	PART NO.	DESCRIPTION			REMARK
		<connector></connector>				C1307	1-126-964-11	ELECT	10μF	20%	50V
CN763 * CN764 △	1-564-507-11 1-508-784-00 1-251-182-11 1-564-512-11	TAB (CONTACT) PLUG, CONNECT PIN, CONNECTOP SOCKET, CRT PLUG, CONNECT PLUG, CONNECT	R (5MM PIT OR 9P	ГСН) 11	P	CN1302 *	1-564-526-11	<connector> PLUG, CONNECT PLUG, CONNECT PLUG, CONNECT</connector>	OR 11P		
CITTOO	1 301 313 11	TECG, CONNECT	OR 101					<diode></diode>			
D761 D762 D763 D764	8-719-923-86 8-719-110-17	<diode> DIODE 1SS133T-7 DIODE MTZJ-T-77 DIODE RD10ESB2 DIODE MTZJ-T-77</diode>	'-15 2			D1301 D1302 D1303 D1304 D1305	8-719-110-17 8-719-110-17 8-719-053-43	DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2 DIODE SLR-325V DIODE SLR-325V	2 2 CT31		
IC761	8-759-434-39	<ic></ic>				D1306 D1307 D1308 D1309	8-719-110-17 8-719-110-17	DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD10ESB2 DIODE RD5.6ESB	2		
		<coil></coil>						<ic></ic>			
L761	1-410-682-31	INDUCTOR	470μΗ			IC1301	8-742-088-10	HYB IC SBX1780-	51(10)		
		<resistor></resistor>						<jack></jack>			
R761 R762 R763	1-219-743-11 1-260-132-11 1-215-420-00	CARBON	100 560K 910	5% 5% 1%	1/2W 1/2W 1/4W	J1301	1-770-361-11	TERMINAL BLOC	CK, S		
R764 R765	1-249-426-11 1-215-430-00		5.6K 2.4K	5% 1%	1/4W 1/4W			<resistor></resistor>			
R766 R767 R768 R769 R770	1-260-101-11 1-215-903-11 1-260-133-11 1-260-099-11 1-247-807-31	METAL OXIDE CARBON CARBON	1.5K 68K 680K 1K 100	5% 5% 5% 5% 5%	1/2W 2W F 1/2W 1/2W 1/4W	R1301 R1302 R1303 R1304 R1305	1-249-425-11 1-249-416-11 1-249-417-11 1-249-425-11 1-247-815-91	CARBON CARBON CARBON CARBON	4.7K 820 1K 4.7K 220	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W
R771	1-260-087-11	CARBON	100	5%	1/2W	R1306 R1307 R1308	1-247-815-91 1-249-420-11 1-247-895-91	CARBON CARBON	220 1.8K 470K	5% 5% 5%	1/4W 1/4W 1/4W
		<spark gap=""></spark>				R1309 R1310	1-247-895-91 1-249-429-11		470K 10K	5% 5%	1/4W 1/4W
SG761 SG762	1-519-422-11 1-519-422-11	GAP, SPARK GAP, SPARK				R1311 R1312 R1314 R1315	1-247-804-11 1-247-804-11 1-247-807-31 1-247-804-11	CARBON CARBON	75 75 100 75	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W
******	*******	*******	*******	*****	*****			«SWITCH»			
*	A-1372-441-A	HA BOARD, COM ************ <capacitor></capacitor>				S1302 S1303	1-572-198-11 1-572-198-11 1-572-198-11	<switch>  SWITCH, KEYBO SWITCH, KEYBO SWITCH, KEYBO SWITCH, KEYBO SWITCH, KEYBO</switch>	ARD ARD ARD		
C1301 C1302 C1304 C1305 C1306	1-130-495-00 1-126-959-11 1-126-964-11 1-130-495-00 1-126-964-11	FILM ELECT ELECT FILM	0.1μF 0.47μF 10μF 0.1μF 10μF	5% 20% 20% 5% 20%	50V 50V 50V 50V 50V	\$1306 \$1307	1-572-198-11 1-572-198-11	SWITCH, KEYBO SWITCH, KEYBO	ARD ARD	****	******



REF. NO. PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMA	ARK
* A-1390-826-A	Z BOARD, COMPI				Q1434 Q1435		TRANSISTOR 2S TRANSISTOR 2S				
4-382-854-11	SCREW (M3X10),	P, SW (+)			Q1436	8-729-119-78	TRANSISTOR 2S	C2785-HFE			
	<capacitor></capacitor>						<resistor></resistor>				
C1433 1-106-343-00	MVLAD	0.001µF	10%	200V	R1401	1-249-414-11	CADDOM	560	5%	1/4W	7
C1433 1-106-343-00 C1434 1-106-383-00		0.001µF	10%	200V 200V	R1401 R1402	1-249-414-11		560	5%	1/4W	
C1435 1-107-667-11		2.2μF	20%	160V	R1402		METAL OXIDE	120	5%	3W	
C1436 1-137-364-11		$0.001 \mu F$	5%	50V	R1413		METAL OXIDE	120	5%	3W	
C1437 1-137-364-11		0.001µF	5%	50V	R1431	1-249-414-11		560	5%	1/4W	
C1438 1-106-383-00	MYLAR	0.047µF	10%	200V	R1432	1-249-414-11	CARBON	560	5%	1/4W	7
C1439 1-161-830-00		0.0047µF		500V	R1435		METAL OXIDE	120	5%	3W	
C1440 1-126-933-11		100μF	20%	16V	R1436		METAL OXIDE	120	5%	3W	
C1441 1-102-074-00		0.001µF	10%	50V	R1437	1-249-414-11		560	5%	1/4W	
C1443 1-126-935-11	ELECT	470μF	20%	16V	R1438	1-249-432-11	CARBON	18K	5%	1/4W	7
C1444 1-107-639-11	ELECT	47µF	20%	160V	R1439	1-249-432-11	CARBON	18K	5%	1/4W	7
C1445 1-126-933-11		100μF	20%	16V	R1440	1-249-414-11		560	5%	1/4W	
C1446 1-126-933-11		100μF	20%	16V	R1441	1-249-417-11		1K	5%	1/4W	
21110 1120 733 11	EEEC 1	100µ1	2070	10 1	R1442	1-249-408-11		180	5%	1/4W	
					R1443	1-249-377-11		0.47	5%	1/4W	
	<connector></connector>				D1445	1-249-403-11	CARRON	68	50/	1/4W	7
CN1401 * 1 564 506 11	DI LIC CONNECT	OD 2D			R1445			820	5%		
CN1401 * 1-564-506-11 CN1402 1-564-505-11					R1448 R1449	1-249-416-11 1-249-403-11		68	5%	1/4W 1/4W	
CN1402 1-564-505-11 CN1403 * 1-564-506-11					R1449 R1450	1-249-403-11		08 1K	5%	1/4 W	
CN1404 * 1-564-507-11					R1450 R1451			330	5% 5%	1/4 W	
CN1404 * 1-564-507-11 CN1406 * 1-564-507-11					K1431	1-249-411-11	CARBON	330	3%	1/4 VV	
					R1452	1-249-417-11	CARBON	1K	5%	1/4W	7
CN1431 * 1-564-508-11					R1453	1-249-401-11	CARBON	47	5%	1/4W	7
CN1433 * 1-564-507-11					R1454	1-260-311-11	CARBON	39	5%	1/2W	7
CN1434 * 1-580-689-11			RD) 4I	2	R1455	1-249-384-11	CARBON	1.8	5%	1/4W	
CN1461 * 1-564-506-11 CN1462 * 1-564-507-11					R1456	1-215-916-00	METAL OXIDE	680	5%	3W	F
	, , , , , , , , , , , , , , , , , , , ,				R1457	1-249-417-11	CARBON	1K	5%	1/4W	F
CN1463 1-564-505-11	PLUG, CONNECT	OR 2P			R1458	1-249-384-11	CARBON	1.8	5%	1/4W	F
CN1464 * 1-564-507-11	PLUG, CONNECT	OR 4P			R1459	1-249-400-11	CARBON	39	5%	1/4W	F
					R1460	1-215-916-00	METAL OXIDE	680	5%	3W	F
	DIODE				R1461	1-249-414-11	CARBON	560	5%	1/4W	7
	<diode></diode>				R1462	1-249-414-11	CARBON	560	5%	1/4W	7
D1431 8-719-110-88	DIODE RD39ESB2	)			R1464	1-249-417-11		1K	5%	1/4W	
	DIODE RD39ESB2				R1465		METAL OXIDE	120	5%	3W	
	DIODE 1SS133T-7				R1466		METAL OXIDE	120	5%	3W	
	<connector></connector>				*****	******	*******	******	****	****	***
DY1431 1-451-454-11 DY1431 1-451-455-11			,	51S65C)			MISCELLANEOU				
							******	71° T			
	<coil></coil>						RESISTOR ASSY	`			
I 1421 1 410 479 11	INDLICTOR	47					DEFLECTION YOU				(7)
	INDUCTOR	47μH					DEFLECTION YO		) (KP-	41100	<b>L</b> )
L1432 1-410-478-11	INDUCTOR	47μΗ			ZIV	1-431-433-11	DEFLECTION Y		3S650	C/61 <b>S</b> 6	5C)
	<transistor></transistor>					1-451-455-31	DEFLECTION Y	OKE (R) (R	)		
										C/61S6	5C)
•	TRANSISTOR 2SC				<u>^</u>	1-452-790-21					
	TRANSISTOR 2SA TRANSISTOR 2SA						MAGNET ASSY, 4 SPEAKER (10CM		C/61S	65C)	
<u> </u>	~						( 01/-	, , , , , , , , , , , , , , , , , , , ,		/	

The componants identified by shading and mark △ are critical for safety.

Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
	1-505-748-11	SPEAKER (10CM) (KP-41T65C)	
	1-551-448-61	CABLE, P-P	
*	1-557-056-41	CABLE, P-P	
		CORD, POWER (WITH NOISE FI	LTER)
	8-598-414-00	ANTENNA SWITCH AS-2F	,
$\triangle$	8-733-519-05	PICTURE TUBE 07MAC2 (B)	D 445550
$\triangle$	8-733-528-05	(GROUND SPRING) (K PICTURE TUBE 07MAC3 (B)	ŕ
		(GROUND SPRING) (I	KP-53S65C)
$\triangle$	8-733-529-05	PICTURE TUBE 07MAC4 (B) (GROUND SPRING) (K	P-61S65C)
<b>^</b>	8-733-537-05	PICTURE TUBE 07MXC2 (G)	
		PICTURE TUBE 07MXC2 (R) (KI	P-41T65C)
		PICTURE TUBE 07MXC3 (R) (KI	/
		PICTURE TUBE 07MXC4 (R) (KI	
******	ACCESSORIE	**************************************	*******
	ale	*********	
		MANUAL, INSTRUCTION	
		SHEET, PROTECTION (KP-41T65)	C)
		BAG, PROTECTION (KP-53S65C)	
		BAG, POLYETHYLENE (KP-61S6	
×	4-042-463-01	SHEET, PROTECTION (KP-53S650	C/61S65C)
*	4-047-555-01	PLATE, TOP (KP-61S65C)	
*	4-047-774-01	PLATE, TOP (KP-53S65C)	
*	4-049-155-01	BAG, PROTECTION (KP-41T65C)	
*	4-056-291-01	INDIVIDUAL CARTON (KP-53S65	5C)
*	4-056-292-01	CUSHION (UPPER) (ASSY) (KP-5	3S65C)
*	4-056-293-01	CUSHION (LOWER) (ASSY) (KP-	53S65C)
		BOARD, BOTTOM (KP-53S65C)	,
	4-056-300-01	TRAY (KP-53S65C)	
*	4-057-558-01	INDIVIDUAL CARTON (KP-41T6	5C)
*	4-057-559-01	TRAY (KP-41T65C)	
		CUSHION (UPPER) (ASSY) (KP-4	
		CUSHION (LOWER) (ASSY) (KP-	,
		CUSHION (UPPER) (ASSY) (KP-6	
		CUSHION (LOWER) (ASSY) (KP-	
*	4-057-648-01	INDIVIDUAL CARTON (KP-61S65	5C)
*	4-057-649-01	TRAY (KP-61S65C)	

* 4-057-650-01 BOARD, BOTTOM (KP-61S65C)

1-473-749-31 REMOTE COMMANDER (RM-Y136A) 4-978-977-01 POCKET, COVER (FOR RM-Y136A)